Civil Service Journal

Vol. 3 No. 3 January–March 1963

C51.66:
3/3

In This Issue:

GETTING THE MOST FROM SALARY REFORM

HEALTH BENEFITS—WHERE THEY COUNT THE MOST

MANPOWER IN THE TECHNOLOGICAL REVOLUTION

PERFORMANCE POTENTIAL: THE FAIR MEASURE

THE PARTNERSHIP THAT WON THE WEST (PART II)

SPECIAL: *Civil Servants in the Cuban Crisis*

DOCUMENTS
FEB 13 1963
Duke University Library

UNITED STATES CIVIL SERVICE COMMISSION

Civil Service Journal

Volume 3 Number 3

January–March 1963

CONTENTS

Special features *Page*

Civil Servants at Work 9
Civil Servants in the Cuban Crisis ... 18

Articles

Getting the Most from Salary Reform by John W. Macy, Jr. 2
Health Benefits—Where They Count the Most, by Elizabeth F. Messer 4
Manpower in the Technological Revolution, by L. V. Berkner 12
Performance Potential: The Fair Measure, by O. Glenn Stahl 15
The Partnership that Won the West (Part II) 30

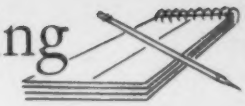
Departments

ADP Billboard 21
Legal Decisions 26
Recruiters Roundup 27
Quotable 28
Training Digest 36

U.S. Civil Service Commission

JOHN W. MACY, Jr. ..... *Chairman*
FREDERICK J. LAWTON .. *Commissioner*
ROBERT E. HAMPTON .... *Commissioner*
WARREN B. IRONS .... *Executive Director*

Worth Noting



JOINT STUDIES will be made by the Budget Bureau, the Civil Service Commission, and certain Federal agencies to improve employee productivity and increase economy in Government. A major goal is to provide necessary public service while keeping Federal employment at a minimum.

NEGRO GAINS in Federal employment are reflected in a report by the President's Committee on Equal Employment Opportunity, covering the period June 1961 to June 1962. Of the net increase of 62,633 jobs in the period, 10,737 or 17 percent were filled by Negroes. Almost 5,500 of the increase was in the $4,565 to $10,165 salary range, and 374 were in the $8,840 to $20,000 salary range. Negro employment in Government climbed from 282,616 to 293,353 during the year. Negroes accounted for 13 percent of the Federal work force at the end of June 1962.

ADDITIONAL ANALYSES of minority group employment in the Federal service, soon to become available, will reflect the nationwide distribution of the Spanish-speaking minority by grade and salary level, and the distribution of employees of American Indian, Puerto Rican, Oriental, and Mexican origin in the selected States of their highest concentration.

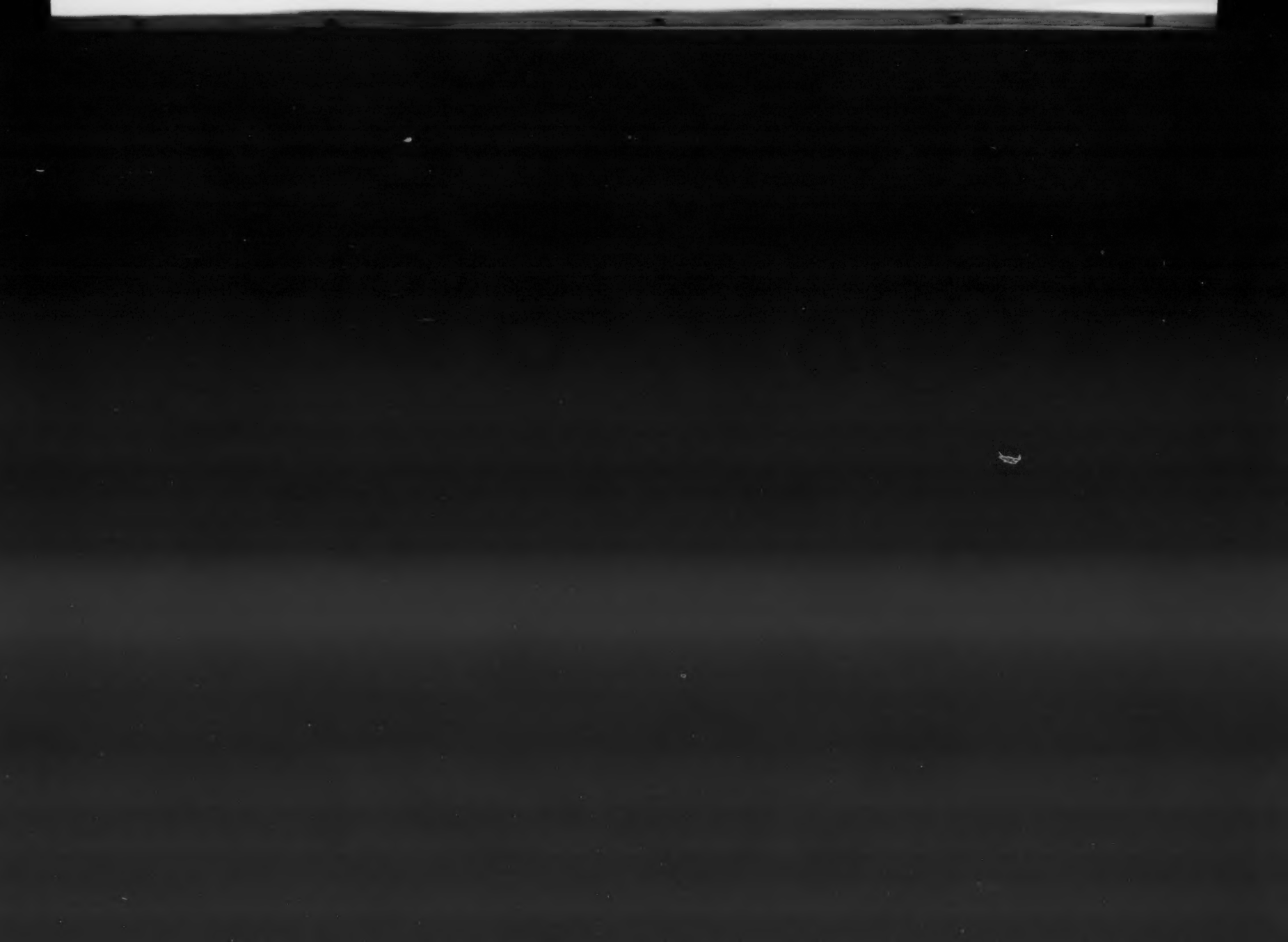
STANDARDS OF CONDUCT and the Code of Fair Practices for the employee-management cooperation program have been reviewed by the President's Temporary Committee on Implementation and approved in nearly all particulars. The work of drafting the Standards and Code, conducted jointly by the Civil Service Commission and the Labor Department, has involved extensive consultation with departments and agencies and with union leaders.

CSC CHAIRMAN John W. Macy, Jr., and Dr. Jerome B. Wiesner, Special Assistant to the President for Science and Technology, held a conference January 8 with a small group of leading Government scientists and scientific administrators to discuss ways in which the scientific capability of the Government can be strengthened to meet the requirements of Federal research and development programs. A few university and industry scientists and scientific administrators also attended. Key aspects of the problem of obtaining and developing scientific and technical management talent for Government programs were explored.

LOS ANGELES' new Federal Executive Board held its organizational meeting November 20, electing Robert A. Riddell of Internal Revenue Service its first chairman. Steps are now being taken to establish a board in Kansas City, Mo.

(Continued—See Inside Back Cover.)

The *Civil Service Journal* is published quarterly by the U.S. Civil Service Commission. Editorial inquiries should be sent to: James C. Spry, Public Information Office, Room 269, U.S. Civil Service Commission, Eighth and F Streets NW., Washington 25, D.C. Telephone: DUdley 6–5172 or Code 129, Extension 5172. No special permission necessary to quote or reprint materials contained herein; however, when materials are identified as having originated outside the Civil Service Commission, the source should be contacted for reprint permission. The *Journal* is available on subscription from the Superintendent of Documents, Government Printing Office, Washington 25, D.C., $1 a year domestic, 25 cents additional for foreign mailing. Single copy 25 cents. Use of funds for printing this publication approved by the Director of the Bureau of the Budget by letter of June 1, 1962.



A Proclamation
By the President of the United States of America

EIGHTIETH ANNIVERSARY OF THE CIVIL SERVICE ACT

WHEREAS January 16, 1963, marks the eightieth anniversary of the signing of the Civil Service Act of 1883; and

WHEREAS the Civil Service Act has stood the tests of time in providing the excellence in civil service which is required for successful execution of Federal programs and policies which have deep significance to all Americans and all citizens of the free world; and

WHEREAS the Act of 1883 has been strengthened by subsequent laws, interpretations, and executive actions to create an even more effective and highly qualified Federal work force; and

WHEREAS the life of every American is touched directly or indirectly every day by the services which Federal public servants perform; and

WHEREAS public esteem for career civil servants is a prerequisite for attracting well-qualified citizens to compete for Government service, a fact which requires greater public awareness of the value of the merit system, the achievements of Government workers, and the career opportunities offered in Federal service:

NOW, THEREFORE, I, JOHN F. KENNEDY, President of the United States of America, do hereby call upon the people of the United States to participate in the observance of the eightieth anniversary of the Civil Service Act during the month of January 1963.

I also call upon the heads of Federal departments and agencies, as well as leaders of industry and labor and members of all public-spirited groups, to arrange appropriate ceremonies in honor of the public services performed by our able and devoted Federal civil servants throughout the country.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the United States of America to be affixed.

DONE at the City of Washington this twenty-eighth day of September in the year of our Lord nineteen hundred and sixty-two, and of the Independence of the United States of America the one hundred and eighty-seventh.

[SEAL]

JOHN F. KENNEDY

By the President:

GEORGE W. BALL,
Acting Secretary of State.

From Act to Action:

GETTING THE MOST FROM SALARY REFORM

by JOHN W. MACY, Jr., *Chairman*
U.S. Civil Service Commission

IF THE LONG-OVERDUE REFORMS contained in the Federal Salary Reform Act of 1962 are to achieve fully the publicly stated goals of greater efficiency and productivity of the Federal work force, management must thoroughly educate employees in the purpose of the reforms.

The need for some down-to-earth explanation is clearly evidenced by two conditions:

- Too many persons—both within and outside the Government—are viewing the Reform Act only in terms of what Federal employees are earning now, what they will be earning in January 1964 and, thanks to the principle of comparability and the annual salary review, what they may be earning in the years ahead.
- There is misunderstanding of an important incentive for increased efficiency and productivity of the work force—requiring employees to meet acceptable levels of competence in their jobs to earn within-grade salary increases rather than gain them on the basis of time in the job.

This call for some plain talking may seem unduly harsh when a strong justification argument for the reforms was that for too long the vast majority of dedicated people manning our important and frequently crucial Government programs have been underpaid. It is not meant to be harsh. But perspective must be restored by modifying the belief that "pay catch-up" for employees was the *only* reason for the reforms with the realization that the *overriding* justification for them was the public interest.

That the public interest is paramount is shown in many ways. The Reform Act was judged to be one of the most significant pieces of Federal personnel legislation enacted since the Classification Act of 1923—not because it granted pay raises, but because it will have a long-lasting beneficial impact on Government administration and programs for these reasons: (1) It establishes a system which can control payroll expenditures with equity to *both* the Federal employees and the taxpayers, (2) it provides the flexibility in salary needed to motivate and reward initiative and industry directed at getting the public's business done, (3) it is a first step in making Federal salaries high enough to attract and retain the best people to safeguard the national security and to provide needed public services, and (4) for the first time in Federal pay history it gives a degree of executive discretion to meet those individual and special needs in the salary area which, left unsatisfied, hamper efficient operation and productivity.

Before the reform legislation became law, Congressional committees charged with drafting the new act expressed the same belief about the public interest being paramount. The Senate Committee report on H.R. 7927 said:

"To meet its responsibility to the public, the salary system must pay enough to permit competent staffing in order not to endanger the national security nor to degrade the public service; but it must not pay more than is necessary for this purpose and to provide equity for the employee."

Upon signing the passed bill into law last October, the President in part remarked:

"It is not merely a salary-increase statute. It furnishes a foundation for adjusting and continuously maintaining

Federal salaries comparable to levels of equal difficulty and responsibility in private enterprise. Ultimately, it will permit us to prevent large-scale attrition of Government employees due to more attractive private industry salaries. At the same time, it should not have an unsettling effect on private enterprise salary rates. By helping to reduce turnover, by attracting more capable people into the Federal service, and by improving employee morale, this legislation will make an important contribution to increased productivity."

I believe it should be quite clear that while emphasis was placed on the need for adequate Federal salaries, that adequacy is aimed at maintaining a high degree of competence in the Federal work force. This objective is to be achieved not only by being able to attract the best available talent into the service but also by making the best use of it and by providing the kind of motivation that will make possible effective performance, retention, and advancement of men and women who can measure up to high standards.

NOW I WANT TO MEET HEAD-ON this misunderstanding of the principle laid down in the new law that within-grade increases must be earned by measuring up to an acceptable level of competence. I believe confusion about this principle has been formed out of context. It is essential that this principle be judged and applied within the framework of the new salary structure where Federal salaries are based on comparability with rates in private enterprise.

The principle of comparability includes more than matching of pay rates for similar jobs in business and Government. It means also adoption of successful practices of business salary systems designed to achieve high employee motivation and productivity. These practices, as adapted to the Federal statutory pay systems, include:

(1) A requirement that work must be of "an acceptable level of competence" before an employee can be given a length-of-service (within-grade) increase.

(2) A provision for an *extra* increase within the grade for an employee whose work is of especially high quality.

(3) Increases in pay *within* grades that are large enough to motivate high performance, with successive within-grade increases extending over a considerable number of years so that employees who are not promoted to higher grades still have financial incentives ahead of them.

(4) Provision for employees who are promoted to higher grades to receive pay raises equal to at least two within-grade increases of their former grades.

(5) Pay intervals *between* grades of work that are great enough to serve as positive inducements to seek promotion and the assumption of greater responsibilities.

The withholding of a within-grade increase is only one in an ascending scale of incentives.

Another criticism recently heard is that the acceptable level of competence is to be determined by the head of each agency, and therefore, different standards may be used by different agencies. Congress inserted the provision vesting authority for setting an acceptable level of competence in each agency head in the Administration's proposed pay bill. This action was a recognition of the widely differing needs of Federal agencies and expressed congressional intent to allow flexibility of standards to meet these needs. Although some general guidelines have already been established, the Commission is empowered by E.O. 11073, January 2, 1963, to issue regulations and standards, if necessary, to ensure that only those employees whose work is of an acceptable level of competence—as determined by agency heads—will receive within-grade increases.

Perhaps the most serious misunderstanding, or even fear, of the acceptable level of competence is that supervisors will let prejudice affect their judgment on whether an employee has earned his within-grade increase.

The entire Federal service is dependent upon the integrity, fairness, and good judgment of supervisors. If they cannot be trusted to grant or withhold within-grade increases figured in hundreds of dollars, how can they be trusted to administer key Federal programs with expenditures in millions of dollars and deeply involving us all? Supervisors are only human and perhaps some errors will be made. But the supervisor who denies a within-grade increase must be aware that his reasons will be subject to scrutiny at a higher level if the employee exercises his right to have a reconsideration of the supervisor's determination that the employee's performance is not at an acceptable level of competence. If the supervisor misuses this tool for incentive, the remedy will be to re-educate him or remove him.

I believe management should make it very clear to their employees—and to their supervisors—that the Administration fully expects supervisors to make use of this incentive feature of the law. However, this should not be cause for alarm on the part of the overwhelming majority of Federal employees whose performance would more than measure up under the higher standards. It will affect, and properly so, those who have been "just getting by"—whose performance has not been so poor as to require removal but which has been hovering near the critical level. On the basis of my impressions of the competence of the present Federal work force, I would expect that not more than a small number of employees at any one time and in any one agency would have their regular within-grade increases withheld.

The Administration expects management to utilize fully all other pay reforms to bring about the desired

(Continued—See SALARY REFORM, p. 25, col. 2.)

In July of 1960, the world's largest employer-sponsored health insurance program—the Federal Employees Health Benefits program—swung into operation for the first time, with participating employees and their employing agencies sharing the costs.

More than 1,800,000 employees—over 90 percent of all those eligible to participate—elected coverage in one or another of the 38 plans available under the program. Counting dependents of those who chose family enrollments, nearly 5 million people were covered.

During October 1961, as the first contract term ended, the Civil Service Commission declared an "open season" during which enrolled employees could change plans, options, or type of enrollment, and employees who had previously decided not to enroll could enroll. 96,000 more employees joined the program for the first time, and 97,000 (5.3 percent) changed plans.

What has happened since the program began two and a half years ago is the subject of this article, based on experience with the program and on carrier reports covering the first 16 months of operation.

Health Benefits— Where They Count the Most

by **ELIZABETH F. MESSER**
Assistant to the Deputy Director
Bureau of Retirement and Insurance
U.S. Civil Service Commission

THE TALL MAN with the patient expression said simply, "I *count* on it now." *What* he counts on now is his employee health insurance—to maintain the medical services his invalid wife must have, without mortgaging the future of his teen-aged son. His wife requires much care, and her condition does not improve. The medical bills are big and no let-up is in sight. Since July of 1960, his insurance has paid more than $13,000 of the expenses of his wife's care and treatment.

—The shorter man, recently widowed, "could not have managed without it." His wife's final illness, tragically long and painful, involved extensive surgery, drug and radiation therapy, special nursing care at home, transportation by ambulance, and other special services—at bankrupting costs. His health insurance helped provide those services by paying about $5,000 of the expenses in a 2-year period.

The author was assisted in preparing this article by Marjorie G. Elsten, Solomon Papperman, and Joseph Zisman of the Commission's Bureau of Retirement and Insurance.

—The silver-haired man, beloved throughout his agency, can now get around in a wheelchair. The stroke that left him paraplegic has yielded that much to months of treatment in an orthopedic hospital and rehabilitation center. With no family, he is now learning to live at his own home in relative comfort—with therapy, continuing nursing care, and such specialized equipment as a hospital bed, a wheelchair, and braces already financed by his health insurance to the extent of $9,300.

—The pretty brunette has just returned to work—wearing orthopedic shoes instead of her usual trim heels. A hip injury, resulting from a fall at home, put her in the hospital in traction for 3 weeks. She mailed her health insurance claim to the carrier of her plan on Thursday and in the following Tuesday's mail received a check for over a thousand dollars—"every cent I'd claimed," she said, "and so fast! Suppose I hadn't had that insurance!"

—The thin redheaded fellow announced, with great satisfaction, "I haven't had to call on my health insurance

for a single cent, thank God!" He has seven young children, none yet out of high school. He, too, counts on his health insurance for protection against such catastrophes as those experienced by the others. He considers the insurance one of his best investments, even though he has never "cashed in" on it, and he profoundly hopes he'll *never* have to use it. He realizes that his "money's worth" comes from the protection purchased by his premiums as well as from any benefit dollars he might receive.

These are all factual cases. They and others like them provide an almost endless series of deeply moving human dramas.

ONE-AND-A-QUARTER MILLION BENEFICIARIES

Of the nearly 5 million people covered by the program, 1 out of every 4 received health insurance benefits for medical services obtained during the first 16-month contract term. Their plans provided many kinds of protection not usually offered by plans previously available—one reason the stories of some persons are so dramatic. Another reason: even those persons who were already seriously ill when the program began were insured from the start, to the same extent and at the same rates as others, and there were none of the usual waiting periods and exclusions of pre-existing conditions—even for maternity.

Sixty-five percent of the 1¼ million persons who received health insurance benefits during the first contract term received them from the two Government-wide plans; 14 percent from postal and other employee-organization plans; and 21 percent from the local group and individual practice plans which offer preventive care as well as treatment for illness and accident.

Study of the program's first 16 months of experience is building a picture (see table) of the health, and the illness, of the group. For example, of the persons benefiting during this period—

- Over half (719,000) were hospitalized.
- 406,000 had surgery.
- 1 out of 10 received maternity benefits.
- 1 out of 3 got medical services at home or in doctors' offices.
- More family members than employees benefited.
- Retired employees and their families used their insurance more often, and received larger benefits, per person, than did active employees and their families.
- Benefits averaged $220 per benefiting person, but many received much larger amounts and all had invaluable protection against possible greater costs.

THEIR ILLNESSES . . .

The range of illnesses, and treatment, for which employees and their families received benefits runs the gamut from hay fever to open heart surgery, from obesity to malnutrition, from removal of warts to amputations.

A sampling of the claims paid by one of the large plans shows that more people received benefits for treatment of ailments or diseases of the digestive system—such as appendicitis, ulcer, hernia, hepatitis, gall bladder difficulties, and colitis—than for any other cause. Nineteen percent of all persons receiving benefits from the plan suffered from such illnesses. Next most frequently found ailments, in descending order, were:

- diseases of the urinary and reproductive systems—such as kidney stones, Bright's disease, inflammation or rupture of the bladder or kidney, prostate gland difficulties, infections and growths relating to the female organs (13%).
- diseases of the circulatory system—such as heart attacks, rheumatic fever, high blood pressure, hardening of the arteries, varicose veins, hemorrhoids, anemia (9.7%).
- accidents—fractures, dislocations, cuts, burns, poisoning (8.9%).
- diseases of the nervous system and sense organs—such as strokes, Parkinson's disease, epilepsy, eye and ear infections, mastoiditis and mental illnesses (6.7%).
- diseases of the bones, joints, and organs of movement—including such ailments as arthritis, rheumatism, and slipped discs (6.4%).
- allergic, endocrinal, and metabolic disorders—such as hay fever, asthma, goiter, diabetes, thyroid difficulties (3.5%).
- all others, including childhood diseases, infectious diseases, and respiratory ailments such as influenza and pneumonia.

Interestingly, these same classes of illness ranked in exactly the same order in terms of dollar benefits paid by another large plan.

Because of general public concern about tuberculosis and cancer, some of the larger plans kept special records on the Federal employee group's experience with these particular illnesses. Tuberculosis occurred infrequently but, like cancer, was expensive when it did occur. In one plan, fewer than a fifth of one percent of the benefiting persons were treated for tuberculosis; their benefits for the first contract period averaged about $800 per person. Cancer struck much more often: 2.6 percent of the persons receiving benefits from the same plan suffered from malignancies of various kinds. The two Government-wide plans together made benefit payments of almost $9 million during the first contract period for care and treatment of cancer victims. (over)

The program also extended a helping hand on happy occasions: more than 125,000 babies were born, during the first contract term, to insured Federal employees, with maternity benefits averaging $180 per case. Most hospital confinements for maternity cases lasted 4 to 5 days.

Although maternity benefits usually covered a smaller part of actual expenses than did nonmaternity benefits, they nevertheless represented nearly a tenth of all benefits paid by all plans during the period. Rather surprisingly, miscarriages accounted for about 9 percent of the 141,000 cases in which maternity benefits were paid.

THOSE WHO WERE HOSPITALIZED . . .

The average hospital stay was for 7.7 days. Four out of every five stays under the Government-wide plans, for example, were for less than 10 days, and fewer than 4 percent were for as long as 30 days. Employees generally stayed 3 to 4 days longer in the hospital than their family members did, and retirees stayed much longer than active employees did (nearly 18 days per hospitalized retiree as compared with 10 for active employees and 6.6 for their family members).

Some people were hospitalized for over 4 months—an experience that could have been financially disastrous if they had not been insured. The more than 4,825,000 days of hospital care provided during the first contract term averaged about $35 per day for hospital room and board and such other hospital facilities and services as use of operating and recovery rooms.

AND THOSE CARED FOR ELSEWHERE . . .

It is in the area of out-of-hospital services that persons covered by the Federal employees program probably have gained the greatest protection in comparison with their previous coverage. Very few plans previously available, for example, provided benefits for drugs and medicines used outside the hospital, for nursing care at home, or for purchase or rental of durable medical supplies and equipment.

The man suffering from a hypertensive cardiovascular disease is probably typical so far as drug benefits are concerned. His doctor has prescribed a combination of drugs, including a tranquilizer, digitalis, reserpine, and a sulphate, which costs about $60 a month—month after month after month. His plan reimburses him 80 percent of this cost after he meets his $50 a year deductible. Treatment by drugs for control of allergic reactions and of mental and nervous disorders is often equally, or more, expensive. Persons who require drugs for control of these long-term diseases, and persons who are given some of the newly developed drugs for treatment of hard-to-manage acute illnesses, frequently receive substantial benefits for drugs alone.

Benefits for professional nursing care—and use of licensed practical nurses in lieu of registered nurses under some circumstances—reimbursed employees and their families thousands of dollars and made available to some of them care that might well have been out of their financial reach otherwise. One family, for example, had expenses of $22,125, of which $14,079 was for nursing care; the plan paid a total of $18,442 in this case. Another family had expenses totaling $18,363 for one illness, including $8,252 for nursing care; the plan paid $15,763. Nursing care represented thousands of dollars of the total benefits paid in each of these cases. Cost of special nursing care, either in convalescent homes or in the patient's home, is high, but such care may be less expensive than longer hospitalization would be and it is frequently better for the patient, both physically and psychologically.

Plans participating in the program have paid the major part of the costs of renting or buying hospital beds for patients who could be cared for at home if proper equipment was available; hydraulic lifts for patients who cannot move themselves; walkers for people learning to use their legs again; oxygen tanks and masks for patients who need them intermittently and tents for those who need them constantly; crutches, braces, and artificial limbs; heart stimulators; and other specialized durable equipment.

The importance of coverage such as this seems likely to grow as modern medical advances make it possible to get patients out of the hospital and under proper home care more quickly than before. The Federal program has been a trailblazer in demonstrating both the value and the practicality of providing such coverage and is believed by many to have been an important influence in the spread of such coverage.

BIG CLAIMS AND LITTLE ONES . . .

Big claims, of course, are impressive—and they are numerous:

- the woman whose husband had Parkinson's disease—$5,000 in benefits.
- the employe whose daughter is hospitalized for psychiatric treatment—$9,000 in benefits.
- the man whose wife and son were in an automobile accident as a result of which the wife died—over $13,400 in benefits already paid for hospitalization, surgery, and treatment of burns, and benefits continuing for the still-hospitalized son.
- the emphysema victim—over $6,700 in benefits.
- the employee whose son has asthmatic bronchitis—$10,170 in benefits.
- the employee whose wife suffered from a form of tuberculosis—$16,400 in benefits.
- the girl who was attacked and beaten on the street—her plan has already paid about $20,000 in benefits and is still helping finance her care and treatment.

FEDERAL EMPLOYEE HEALTH BENEFIT EXPERIENCE—*July 1960–October 1961*

	Persons benefiting	Aggregate benefits	Average per beneficiary	Average days' hospitalization*
Employees	406,700	$105,858,200	$260	10.1
Dependents	846,000	167,076,800	197	6.6
Annuitants	8,200	3,703,700	450	17.7
Dependents	5,100	1,631,600	320	10.5
All	1,266,000	278,270,100	220	7.7

ILLNESSES FOR WHICH BENEFITS WERE PAID

(Excluding maternity, and ranked in descending order)

1. Diseases of digestive system
2. Diseases of urinary and reproductive systems
3. Diseases of circulatory system
4. Accidents
5. Diseases of the nervous system and sense organs
6. All other

*per individual hospitalized

How much the insurance actually protects, and what this protection means to the individual, is probably best realized and expressed by those who have had occasion to use it:

"My faith has been renewed in fairy godmothers and Santa Claus. I never realized what a wonderful policy you and Uncle Sam had arranged for me until I experienced the serious illness I am now recovering from. . . . It is a comforting feeling to know that my hospital bill and doctor bills have been paid, and I feel sure the knowledge of this financial help influenced my progress. . . . I have laid aside my crutches and am able to use a cane. . . ."

"Enough cannot be said for our . . . insurance. It is one of our greatest blessings. You have paid out such large sums for us, and Ray still has his legs and can walk. How grateful we are. . . ."

"Without your help, things would have been impossible, as we had used all of our finances. Thanks to you and Mr. W– who helped rush the application through, we were able to continue the nursing care. My husband is slightly improved and I hope he will be well enough to go home in the near future."

"You will never know the peace of mind I had lying in the oxygen tent and knowing that all my bills were being paid, even to the night nurse. It's a good feeling to know that someone is constantly checking on you, even while you're sleeping."

"If Mildred and I had not had this hospitalization, we would have had to sell our home to pay the bills. . . ."

Impressive as such cases are, they do not begin to tell the whole story. Most benefits paid or provided are obviously much more modest—but nevertheless very important to the families receiving them. One retiree expressed well the sentiments of both employees and retirees when he wrote his plan: "I want to extend my thanks . . . for the prompt settlement of my claim. Twenty dollars may seem small, but to a retiree no amount of money is small. Again I thank you."

PROGRESS . . . MADE AND IN THE MAKING

On the basis of experience during the first contract term, and of employees' desires as expressed through correspondence and an extensive attitude survey, significant changes have been made in the program. Additional changes will be made in the future to meet employees' needs and to accommodate changes in medical practice.

For the carriers especially, the first months of operation were difficult and hectic. Most had grown, suddenly and substantially, in size. All of them began with a new and different "package" of benefits, with which their own operating staffs were not yet thoroughly familiar. They had a new clientele—also unfamiliar with the details of the new plan. They had to cope with new accounting and statistical reporting systems and requirements, as well as with new records and claims systems. They had new forms and new procedures—and new problems for which no procedures had yet been worked

out. And some were more than a little uneasy about doing business with "the Government."

By the end of the first contract period, most carriers had overcome many of these early problems and were shaking down to a smoothly running operation. Some had redesigned their claims forms, simplified their benefit payment procedures, and improved instructions for obtaining benefits. They had trained their claims staffs, so that better information and much prompter service on claims were being provided to their Federal enrollees.

And both carriers and the Commission knew some of the changes that needed to be made in the benefit structures of the plans, to plug gaps in the protection being provided to enrollees. Most of these changes were made for the second contract term. For example:

Several of the comprehensive plans significantly increased their coverage of illnesses and accidents treated outside the local area in which they operate; others eliminated or reduced "over the counter" charges for certain services provided at their clinics; still others shifted from a "per illness" to a "per calendar year" basis for providing hospital benefits.

Some of the employee organization plans added benefits for diagnostic tests, for first aid, for nursing care; some covered services of chiropodists; others liberalized their surgical fee schedules; and still others increased hospital benefits.

Both Government-wide plans agreed to cover purchase rather than rental of durable equipment under some circumstances, cosmetic surgery for improvement of bodily function, and some services of chiropodists. One extended coverage to include hospitalization for dental care under specified conditions; a benefit for first aid in the doctor's office when no other benefit was payable; and radiation therapy, outside as well as inside a hospital, for such nonmalignant conditions as bursitis and acne. The other recognized the services of psychologists in diagnosis and treatment of mental and nervous disorders, as well as certain Christian Science services; removed its separate deductible for prescription drugs and medicines used outside the hospital; and agreed to cover treatment of obesity, aphasia, and alcoholism, as well as treatment of accidental injury which occurred prior to joining the plan if delay in treatment had been medically indicated.

Other problems of coverage remain and are being worked on jointly by the Commission and the carriers. One of these concerns diagnostic admissions to the hospital. To illustrate: a person is sent to the hospital with an acute pain, undiagnosed; the medical treatment given him at the time is minimal, but he is X-rayed and given a series of other tests on the basis of which it is determined that he has a gastric ulcer; he is then sent home to be taken care of by means of medication and controlled diet. Because the illness is diagnosed but not actually treated in the hospital, the admission is classified as a diagnostic one, which under several plans automatically operates to deny or reduce the benefits.

Another situation that causes confusion, resentment, and in some cases reduced benefits arises from changing practices in the billing for certain services such as administration of anesthetics and making of laboratory and X-ray tests. In many (but not all) parts of the country, such services have in the past been provided and billed for by hospitals as part of the services of their staffs. Increasingly, however, they are now being provided by doctors called in on a fee basis, and these doctors naturally bill the patient for their services. In some areas and under some plans, this practice makes the service subject to the deductible and to coinsurance—which it would *not* be if provided and billed for by the hospitals as part of their regular services. The Commission and the carriers are trying to work out something to insure a satisfactory benefit that does not depend on where and from whom the services are obtained.

Some plans restrict severely the classes of practitioners for whose services they will pay benefits; some do not cover, or cover inadequately, mental and nervous disorders, tuberculosis, and congenital conditions.

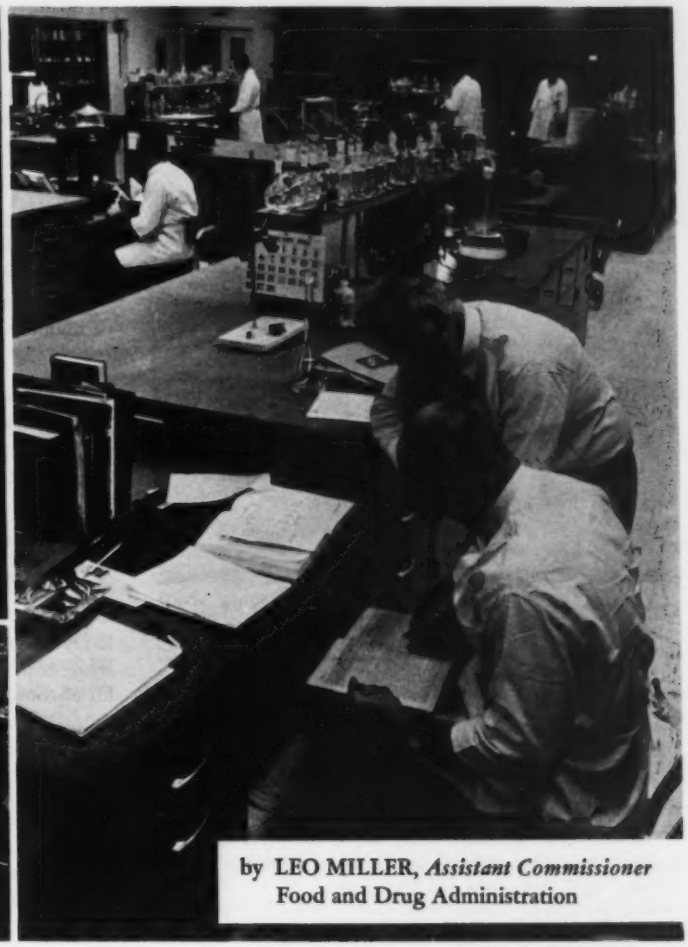
While employees naturally would prefer complete coverage, the Commission and the carriers have to consider the probable cost of changing the benefit; whether and to what extent any of the cost can be absorbed; and whether the additional benefit is worth any premium increase it might require of subscribers.

There are other problems, still deeper, to which solutions are not likely to be found in the immediate future. To generalize from the examples just cited: how "rich" should the protection be, and how much "first dollar" coverage is it desirable, and possible, for the plans to provide? Should there be *any* deductibles, *any* over-the-counter charges, *any* fees for service? If not, can Federal employees afford these increased benefits? Should every patient pay, out of pocket, some part of the cost of his health care at the time he gets it—both to increase the likelihood that he will follow the medical advice given him and to deter overuse of medical services? Should insurance programs emphasize, and spend more premium dollars on, protection against costs of catastrophic illnesses? Or should emphasis and dollars go for the visit to the doctor's office, or his house call, when Johnny first has the sniffles—and maybe nip in the bud Johnny's incipient (and expensive) pneumonia?

The very existence of so many different plans, while having some definite advantages, also poses problems: employees find the multiplicity of plans confusing and many believe it unnecessary; payroll offices throughout the Government find their operations much more complex; production, printing, shipping, stocking, and distribution of brochures describing so many plans is expensive both in amounts charged directly to the program and in other time devoted to such activities by the agen-

(Continued—See HEALTH BENEFITS, page 21.)

Civil Servants at Work:



by LEO MILLER, *Assistant Commissioner*
Food and Drug Administration

FDA CIVIL SERVANTS rely on exact scientific principles to determine purity of food and drugs to be consumed by the public.

CONSUMER PROTECTION AND FDA

THE TIME: any one of the 40 working hours in any week of the year. A chemist in Kansas City is determining how much pesticide residue remains on a food; in Washington, D.C., a medical doctor is reviewing research data on the safety and effectiveness of a new drug; in Philadelphia a scientifically trained inspector questions a cosmetic maker about colors being used; and in San Francisco an official explains labeling requirements for household chemicals.

All are Government employees making science work through law to protect consumers of foods, drugs, cosmetics, and hazardous household substances. They serve with the Food and Drug Administration—an agency whose mission affects the daily life of every man, woman, and child in the United States.

The Food and Drug Administration, an operating agency of the Department of Health, Education, and Welfare, is now known to the public simply as the FDA. Perhaps some will recognize FDA only in connection with the relatively recent publicity involving thalidomide—the drug which caused thousands of deformed babies in Europe and other countries around the world. FDA refused to allow the drug to be marketed in the United States because its safety was not proved to the satisfaction of FDA scientists. Dr. Frances O. Kelsey received the Nation's highest award to Federal employees,

670040 O - 63 - 2

CONTROL METHODS are checked in a drug manufacturing establishment.

the President's Award for Distinguished Federal Civilian Service, for her part in FDA's action.

The thalidomide episode is a dramatic, but otherwise not unusual, example of FDA's mission: consumer protection. Less dramatic, but equally dynamic, are the hundreds of actions taken every day to carry forward the 4 consumer rights defined by President Kennedy in his message to Congress March 15, 1962:

> *"The right to safety—to be protected against the marketing of goods which are hazardous to health or life."*

As in the case of thalidomide, FDA's primary mission is protecting the public health by enforcing the laws Congress has passed to ensure the safety of foods, drugs, cosmetics, and hazardous household substances. FDA checks the manufacturers' proof of safety of new drugs, pesticides, food additives and colors before these products can be marketed. Every batch of insulin for the diabetic; the life-saving antibiotic drugs; and the colors used in foods, drugs, and cosmetics is subject to test and certification by FDA scientists. Other scientists check products on the market to see that the safety rules are followed.

> *"The right to be informed—to be protected against fraudulent, deceitful, or grossly misleading information, advertising, labeling, or other practices, and to be given the facts he needs to make an informed choice."*

Labeling must give consumers the information needed to make an informed choice. Such a choice cannot be made if the consumer is *misinformed*, or *if the product is not what it claims to be*. The law makes FDA responsible for policing the labeling of foods, drugs, and cosmetics so that consumers are protected from false and misleading claims.

> *"The right to choose—to be assured, wherever possible, access to a variety of products and services at competitive prices . . ."*

Enforcement of the law means that regulated products will contain what the consumer expects when he chooses. Without this assurance free choice is meaningless.

> *"The right to be heard—to be assured that consumer interests will receive full and sympathetic consideration in the formulation of Government policy, and fair and expeditious treatment in its administrative tribunals."*

As a consumer protection agency, FDA always has one ear tuned to hear the public voice. Consumers' complaints and opinions are carefully considered. And on matters of special interest, public hearings may be held to give both consumers and manufacturers every opportunity to be heard. Food standards, for instance, are legal requirements affecting the identity, quality, and fill of containers for many foods. They are set after full consideration of consumer and industry views.

FDA is dedicated to the task of making these consumer rights a reality in the market place. Beginning with enactment of the first Federal Pure Food and Drug law in 1906, FDA has developed a scientific, law enforcement organization now unexcelled anywhere in the world.

"Father of the Pure Food and Drug Law" was civil servant Dr. Harvey W. Wiley, chief chemist for the Department of Agriculture at the turn of the century. He

FDA BACTERIOLOGIST seeks identity of organism in food-poisoning outbreak.

was a physician as well as a laboratory scientist.

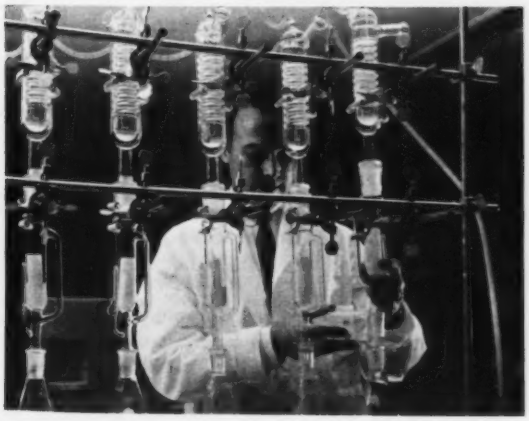
For 20 years Dr. Wiley probed into the chemistry of food adulterants, and even attempted to determine the effects on humans of some widely used preservatives.

Dr. Wiley was assisted in his studies by a volunteer group of civil service chemists who popularly became known as "Wiley's guinea pigs" or "Wiley's poison squad."

Their discoveries, plus disclosures by national publications such as Collier's and Ladies' Home Journal, helped to create public outrage at some of the conditions found in the food and drug industries of the late 1800's, and led to enactment of the 1906 law.

Through court interpretation and Congressional amendment, the law has proved to be flexible enough to meet consumer protection problems caused by scientific progress and advancing technology. In 1938 the law was completely rewritten and greatly strengthened. A drug tragedy that killed over 100 people in 1937 resulted in a revolutionary requirement for Government clearance of the safety of new drugs. The drug, elixir of sulfanilamide, used a poisonous solvent similar to one used in anti-freeze today. But the scientific advances that followed World War II brought so many changes in our food, drug, and cosmetic supply that it was soon evident that the law was obsolete again in many respects.

Between 1950 and 1960 Congress passed these major amendments to the 1938 Federal Food, Drug and Cosmetic Act: A requirement that drugs safe for use only under a doctor's supervision be sold only upon prescription (Durham-Humphrey Amendment); a provision specifically authorizing FDA inspection of food, drug, and cosmetic plants; a provision establishing procedures by which FDA sets safe limits on pesticide residues that may remain on raw agricultural products (Miller Pesticides Amendment); a requirement for pre-marketing safety clearance by FDA of food additives; and provisions strengthening safety controls for colors used in foods, drugs and cosmetics.



FDA CHEMIST determines the exact ingredients used in a potent drug.

UNDERCOVER investigator poses as truck driver to make roadside "buy" of illicit drug. (*FDA photos*)

Congress broadened FDA's mission of consumer protection still further in 1960 with the Federal Hazardous Substances Labeling Act. This requires warning labels and other consumer protection information on household products which may cause accidental injury or illness.

Then, in 1962, Congress enacted the Kefauver-Harris Drug Amendments which require manufacturers to prove new drugs *effective* as well as safe before they are marketed, and made other far-reaching changes to strengthen drug protection.

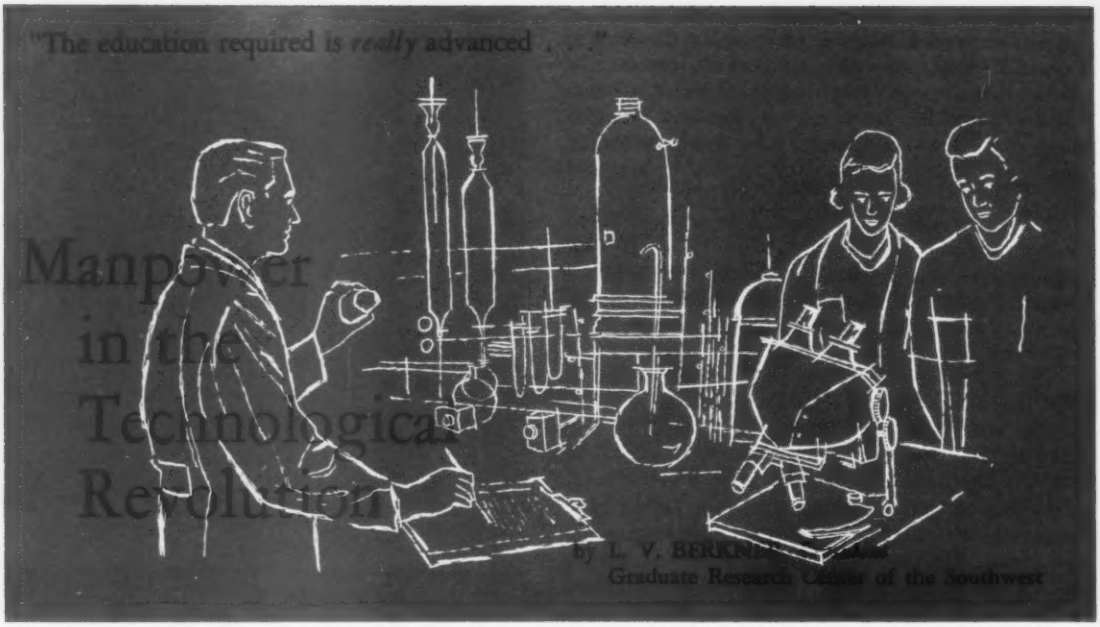
Thus, for the 57 years of FDA's activities in protecting the public, the Congress has continued to enact new laws which have made FDA a principal consumer protection agency of the Federal Government.

In carrying out its mission, FDA obviously requires civil servants of the highest ability and resourcefulness.

At the moment, FDA is conducting a recruiting drive to strengthen its expanded scientific-enforcement responsibility. Among those being sought are medical officers, chemists, bacteriologists, pharmacologists, microanalysts, biochemists, veterinarians, and statisticians. Many of them will staff a new laboratory in Washington.

The anticipated 950 new civil servants who will be needed in 1963 must be men and women who are ready to accept FDA's challenge: how to protect 190 million Americans every day.

The civil service chemist who finds an unsafe residue of pesticide on a food, the doctor who evaluates safety and effectiveness data for a new drug, the inspector who detects the use of a non-permitted coloring agent, the FDA'ers who help a manufacturer to comply with the law or, conversely, to stop one who doesn't—all are performing a most vital service, and one which has an impact on all citizens.



Manpower in the Technological Revolution

By L. V. BERKNER
Graduate Research Center of the Southwest

Today's technological revolution offers both problem and opportunity. Science and technology are speaking loudly, but man—caught up in increasingly complex socioeconomic forces—finds the message hard to decipher. In striving to harness the new opportunities, man's biggest problem is man himself as the vital resource—a resource beset with limited experience, obsolescent traditions, and lagging intellectual capacities.

Every Federal manager is now experiencing many difficult manpower problems in his program operations, and manpower studies reveal that the supply-demand imbalance in the higher-skill fields will get worse before it gets better. The informed view is being sought for the insight it may offer into problems and solutions of today and tomorrow.

Dr. L. V. Berkner, President of the Graduate Research Center of the Southwest, is especially well informed on the technological revolution and its implications for our socioeconomic system. Last fall he presented his views to the Commission's Management Institute. The text of his thought-provoking presentation follows.

MY THESIS ARISES from the technological revolution whose beginning I shall put at the mid-century—1950. Coupled with this technological revolution is a population explosion and a new efficiency of production that is forcing the entire country from a rural to an urban pattern. All new population is now settling in a few cities and within two decades not more than 200 cities will contain the great bulk of U.S. population. This urban concentration in a highly technological context poses radical economic demands for an industrial development to provide for employment and welfare—an industrial complex that can only be derived from the limits of knowledge. Consequently, events require widespread concentration on education at the most advanced level with unprecedented numbers trained at the doctor's level of knowledge, and beyond.

The whole rise of civilization has been characterized by periods of rapid change. After all, the 7,000 years since the invention of writing by the Sumerians represents a mere 100 lifetimes in succession, so that our rise from squalor and degradation to our present status has occurred in but an instant of geologic time. Thus each individual through civilized history has occupied about one percent of civilized time. So we should not be surprised when civilized values change quickly.

Yet during some periods of history civilization changes explosively. Nations that fail to capture the spirit and needs of revolutionary times have been submerged by peoples who are in tune with the forces and elements of progress.

We recall the power of the industrial revolution of the early 19th Century. Sparked by the introduction of

controlled energy in the form of Watt's steam engine, the traditional forms of village production in the home were swept away in a single generation by the efficiency of factory production. Some nations captured this opportunity to become world leaders for ensuing centuries. Others, clinging to obsolescent tradition, failed to recognize or to seize upon the new forces at work. Their subsequent record is economic failure and political instability, coupled with loss of freedom and some form of totalitarianism that enforces an equality of degradation.

Can we then identify the major forces at work today so that we can capture for our people the new opportunities offered by the technological revolution of our time? For if we understand the major socioeconomic forces of our time, we can work with these forces to advance our economic well-being within a framework of political independence and freedom. So I would turn to science and technology from which arise the major economic forces of today.

The science underlying the technology of the industrial revolution arose in the 16th and 17th Centuries from the work of Copernicus, Kepler, Galileo, Newton, Boyle, Harvey, and a whole galaxy of their brilliant successors. This was a science of definable precedent cause and of consequent precise effect that is the basic science of all gross phenomena. Out of this science, men like Francis Bacon in such perceptive works as "The New Atlantis" early conceived its technological consequences. Without question, this science and its emergent technology was a triumph of human progress for it removed the mysticism from natural phenomena. Yet in another sense, the technology of the industrial revolution emergent from that science was severely limited, since it was a mere mathematization of what men had largely perceived before. Man could build structures bigger and better, he could control electric power, he could devise simple communications, he could better harness nature. But his science was not yet sufficiently powerful to create a whole new technology out of the minuscule but more basic phenomena of nature.

As the end of the 19th Century approached, Maxwell had brought the old science to its peak with his mathematical theories of electromagnetism that explained light and predicted radio, and of kinetic behavior of gases that brought us face to face with molecular phenomena. Then science began to fail in its prediction of consequences from precedent actions. Michaelson discovered the invarient velocity of light no matter whether the observer approached or receded from the source. Bacquerel discovered radioactivity, and Roentgen produced X-rays, both of which behaved strangely. Planck, reasoning from pure theory, found that energy did not flow continuously but was packaged in tiny but discrete bundles—a result he himself hardly believed reasonable in light of the science of the day. At the turn of the century, the stage was set for creation of a new and more powerful science.

WITH THE UNFOLDING of the 20th Century came a remarkable series of scientific discoveries. In 1905, Einstein created the relativistic mechanics which revealed the true four-dimensional character of our universe and predicted the identity of mass and energy. In the same year he showed from the photoelectric effect that energy is not continuous but comes in tiny but discrete packages as Planck had predicted, just as matter is subdivided into elemental atoms and electrons. In 1911 Rutherford discovered the atomic nucleus, and in 1913 Bohr described the atom as that nucleus encompassed by electrons held in fixed orbits or shells. In 1924 Heisenberg formulated the principle of uncertainty, when for the first time science learned of the limits beyond which cause and effect were no longer meaningful. In 1926 deBroglie formulated, and then Schroedinger and Dirac elaborated, the wave mechanics which could describe the behavior of matter with mathematical precision.

In 1932, Chadwick discovered the neutron, and in 1939 Hahn and Strassmann produced atomic fission whereby mass was converted into energy, thereby fulfilling Einstein's earlier prediction. Step-by-step, in a mere 35 years, a whole new concept of the physics of nature emerged. This was a different and more powerful physics that not only encompassed the classical physics, but also gave a completely new and very deep insight into nature.

Another example of the departure from classical methods occurs in our present description of the behavior of particles. Some obey a Fermi statistics and some a Bose statistics, depending upon their intrinsic angular momentum—again a demonstration of how our conception of physical reality is sharpened by new approaches.

I must mention here one other development—the formulation of Information Theory by Claude Shannon in 1948—a mere 14 years ago. In this, man acquired the knowledge and methods to build and program the modern computer in a completely logical way. And so he acquired the means by which to employ his new and abstruse physics quite readily in practice.

Thus, at the mid-20th Century the stage was set for a new and more far-reaching socioeconomic revolution

---

ABOUT THE AUTHOR

DR. BERKNER is President of the Graduate Research Center of the Southwest, an institution founded recently in Dallas to stimulate the rapid advancement of graduate education in the Southwest. He was formerly President of Associated Universities, Inc., which organized and directed the Brookhaven National Laboratory and the National Radio Astronomy Observatory. He was a member of and is now a consultant to the President's Science Advisory Committee. He has held high office in many national and international scientific societies and has published nearly 100 scientific papers and volumes. His most recent scientific contribution is the authoritative text, *Science in Space* (McGraw-Hill, 1961). He holds degrees from many universities at home and abroad.

670040 O - 63 - 3

which we now call the technological revolution in contradistinction to the old and limited industrial revolution. This technological revolution arises from the power of the new science and from the precept discovered during World War II that our new science, when consistently applied to any technology, can revolutionize that technology in form, function, and efficiency. This technological revolution that began at the mid-century is based on a completely new insight into nature, and the new ability to uncover otherwise hidden natural phenomena and to manipulate natural processes that were heretofore inconceivable. We can confidently predict that this new technological revolution now rising from a radically modified science will have inevitably a most profound effect on our industry, our daily living, and our future society.

As forerunners of the change to come we have already seen the emergence of nuclear energy with all its problems, and of the commencement of space travel with all its implications. This is but the beginning. We are on the threshold of a world with quite new and far more effective materials for every sort of application. Our concepts of structure, dating from the ancient engineering precepts of the Babylonians, are finally due for radical changes. With forthcoming communications and data systems, we can foresee far more efficient organization and control of industrial processes. New forms of industrial complexes will arise which are as different from the present as were 19th Century factories from the village workshop.

Yes, the socioeconomic revolution ahead is inevitable out of the new science and out of the precept that science can now revolutionize any technology when applied to it consistently.

As direct consequences of the power of the new technology, two other socioeconomic factors assume dominant roles. The first is a new order of efficiency in all forms of production coupled with substitution of modern technological processes as replacement for rapidly obsolescent and less skilled methods. Since this is widely discussed under the heading of automation, enlargement of this subject here is hardly necessary, other than to comment that the evolutionary change of process and labor skills of the first half of the century is now becoming revolutionary in its economic impact with the onset of the technological revolution. For the function and efficiency of the new technology will quickly drive out the residue of industry and production based on the older less skilled technology remaining from the industrial revolution.

The second socioeconomic factor arising from the new technology and its effectiveness is a redistribution and expansion of population. Until the mid-century, most of our geographic area was still primarily rural in character, with large populations depending on production of agricultural products and raw materials. With agriculture becoming industrialized, and new processes employed in production of raw materials, our rural population has halved in the past generation, falling to eight percent of the total. The process is only partially complete since 90 percent of the agricultural output now comes from 45 percent of the partially industrialized farms with the remaining 55 percent of the farmers producing only 10 percent of the total, thereby essentially surviving on the dole of artificial price supports.

At the same time the total population is exploding as a consequence of scientific medical care and public health. U.S. population is now doubling in 40 years.

The point is this—from now on all the added population together with rural migrants will concentrate in a few large cities having the requisite socioeconomic viability to provide employment. Suddenly, in less than a generation, America is changing from predominantly rural to almost totally urban.

Looked at more specifically, this means that Texas, Florida, Kansas, Iowa, Montana and the other 33 States now depending primarily on agriculture and resources must shift in the next decade to major industrial dependence.

These then are the major socioeconomic factors confronting us:

(1) A technological revolution whose forces were fully developed at the mid-century, but whose main impact is ahead.

(2) A consequent efficiency and function of production that renders all previous methods obsolescent in every field of technology.

(3) A sudden urbanization of population in search of employment.

The problem then is to maintain the urban concentrations economically viable by the introduction of industry based on the new technology in a form that can provide new products and services efficiently.

To capture and control the potential of this new technology, to create new industry from it, to direct it for our benefit, we must have men who understand and can manipulate it intelligently.

Obviously, the ideas underlying the technology of today are abstruse and highly mathematical in nature. So to comprehend these ideas, and to manipulate the technology born of them intelligently, we require men of very advanced education in substantial numbers. This does not mean a mere 4-year college education, for the ideas involved are at the very boundaries of knowledge. The education required is *really* advanced. Command of the new technology and of the science from which it is derived requires post graduate education to the doctor's degree and beyond—not less than 8 years

(Continued—See MANPOWER, page 22.)

by O. GLENN STAHL, *Director*
Bureau of Programs and Standards
U.S. Civil Service Commission

Peformance Potential: The Fair Measure

THOUSANDS OF WORDS, written and spoken, have stressed today's need to bring into Government persons of the highest competence. But quality recruiting, by itself, is not enough. Of equal urgency is the need to assure that the capacity to do an excellent job is the key selection factor in the *utilization and placement of people now on the rolls.*

One way of achieving this competence is to make certain that employees already in the service, as well as outside candidates, have the potential necessary for success in the line of work they are entering. This assurance is particularly important when the work is different in kind from that in which they have previously been engaged.

In speaking of the importance of full utilization of our employees, I am not referring solely to those abilities and skills that are obvious or those that are a matter of record. I am referring more particularly to the *potential that hasn't yet been brought to light.* Here, I am convinced, is a rich source of talent that *is* measurable and highly usable.

How then do we measure it? Using it would certainly pose no problem.

It is this in-service aspect of competition that I wish to discuss in this article. I hope that this and subsequent *Journal* articles will provide a clear picture of the Commission's thinking that underlies our qualification standards as they relate to the goals of agency programs.

The policy that advancement depends on ability and potential goes hand-in-hand with the basic tradition of the merit system: that citizens with ability compete to enter the Federal civil service and, after appointment, advance on merit to the higher career levels.

Proper matching of qualifications of individuals and job demands is especially important at the entrance or trainee levels of occupations. Filling positions at these entrance levels presents the greatest challenge to selection methods. *This is particularly true where the new or higher-level career field calls for different abilities, skills, and knowledges not normally acquired at lower levels of other fields of work.*

I am not assuming that the mere fact of prescribing concrete qualification hurdles in filling positions will automatically insure the attainment of excellence. Various means of evaluation plus the skill and integrity of the selecting officer must still be relied upon to find the best. It is essential that he have as good and as wide a field of choice as practicable. In making his final selection, he must put *potential* above all other considerations—the potential to move into what are essentially different or higher job demands. The level at which these new demands begin must be considered an entrance or trainee level, whatever its grade may be.

IN SEARCH OF A YARDSTICK

To make certain that the best qualified persons are selected for promotion to trainee levels of occupations, every employee with potential should have the chance to compete and to show he has the necessary qualifications to progress in the new career field. The problem is how to evaluate this potential for the entrance-level positions.

The evaluation method used must be a good predictor of ability to succeed at the full-performance levels of the occupation. Evaluation of a candidate's past experience and training may have little relationship to the kinds of requirements demanded in a *new* line of work. In such circumstances, consideration of an employee's past work can, at best, provide only general clues as to his ability to progress in the new career field.

Because the job demands differ markedly from the employee's previous assignment, no one has had the

opportunity to observe performance that would be directly predictive of the employee's performance in the new work situation. The fact that supervisory evaluations cannot be related to the demands of the new job somewhat limits the value of these evaluations to management. These evaluations could penalize employees who have not had the opportunity in their former employment to show their aptitude for the new career field.

The pitfalls of using past performance as a basis for predicting success in a new field of work must be kept in mind. As an illustration, let us look at the case of John Doe, an experienced personnel clerk, who is expert in the procedural requirements for transfers, promotions, separations, and other personnel actions.

John may or may not be the right candidate for a trainee placement specialist position. The knowledge and skills he has gained in preparing personnel action forms have not necessarily given him the ability to anticipate personnel needs, identify recruitment sources, understand agency programs, know the world of occupations, plan and conduct recruiting campaigns, develop and write promotion plans, analyze jobs to prepare specific qualification requirements, advise management on sources and placements, or apply interviewing techniques in helping management select the best people for a variety of jobs. But if John cannot do these things well, then the personnel program in his agency will suffer. Neither Federal managers nor employees want personnel machinery run by less than the best trained minds available for such critical personnel work—work in which they have a vital interest.

Without some measurement of potential, the decision as to John's ability to advance in the placement specialist occupation would rest almost wholly on the judgment of the supervisor of the *processing* functions, who might overestimate John's aptitude for the new work (on the basis of his past performance), or underestimate it (because he had had no opportunity to demonstrate it), or not even know enough about placement specialist work to make the evaluation.

This is precisely the type of situation in which management should use another method to predict potential for a new field of work. Specifically, in this case there is a test that gives management a valuable indicator of the employee's potential that is not otherwise available. This qualifying test is designed to predict an employee's general learning ability as well as his potential skill in expressing himself, both orally and in writing. It is *not* a test of knowledge of subject matter or rules, because ordinarily such knowledge can be acquired and is not the principal predictor of success.

Another example would be where professional accounting positions are to be filled. A voucher examiner would not ordinarily be expected to have the training and professional background required of professional accountants. This is really a different kind of work.

VALUE OF WRITTEN TESTS

The requirement that employees pass a general abilities or other appropriate test to qualify for entrance levels of a new line of work now applies to a number of occupations, such as personnel specialist, budget examiner, and management analyst. Psychological research over the past few decades has built up much evidence showing the relationship of success in passing general ability tests to success in pursuits that require the ability to deal with complex concepts and the ability to be effective in oral and written communication.

The use of tests as an aid in predicting the capacity of employees is not unique to the Federal Government. In industry, in State and local governments, and in the military services, tests are used for assignment purposes, for reassignment to different lines of work, for advancement, and for selection of executives. There has been an increasing use of tests in the academic world to help schools and colleges decide which students should be admitted and to assist students in determining their potential for various careers.

Written tests are valuable as a means of uncovering talents and skills among employees which might otherwise go unrecognized. In some instances, such as the evaluation of persons for trainee positions in a different line of work, tests provide the only reliable means for judging learning ability, knowledge, and skills. Thus, jobs that involve planning, organizing, and the solving of unusual problems need employees with a higher level of general ability than do routine jobs.

Written tests are also used to determine whether employees possess the subject-matter knowledge required for entry into some occupations such as accounting, library work, and engineering—subject-matter knowledge that is normally acquired through academic training. Employees who wish to enter such occupations must pass the subject-matter tests when they do not have the prescribed formal training. But it is not primarily this kind of testing to which I am referring here.

Whenever passing of a test is required for entrance into a new career, I realize that some very competent and industrious employees will not be able to qualify for an occupational field to which they may aspire. Nevertheless, it is in the interest of both the Government and the employees to require that employees get a passing score as one indicator of their potential for occupations that involve significantly different qualification requirements. This is not an unreasonable requirement for entry into a new and more demanding line of work.

From the standpoint of the Government, a passing score on the test assures that the employee has the *capacity to learn and to apply the principles* required at the full performance levels of the administrative, technical, or professional occupations concerned. It indicates that the substantial investment entailed in training new employees will not be wasted on employees whose

primary qualifications for the new field of work may have been long, efficient service in jobs that basically have little kinship to the new jobs.

From the standpoint of the employee, it is important that he be selected for a career in which he has the capacity to be successful. No employee should be promoted into a work situation where, after an investment of considerable time and effort, he will find that he cannot fully measure up to the demands of the new line of work. An employee who does not have the required qualifications to move into a new career field may well be able to progress further in his present type of work.

In this regard, career opportunities for employees who are not able to qualify for administrative, technical, or professional positions are being broadened. New standards now recognize that such employees may be called upon to perform difficult and responsible work that provides necessary support to professional employees. They may thus advance to higher grade levels without a basic change in career ladders.

Certainly tests are not infallible. There is always the question of the superiority of the person with a score of 70, the minimum passing rate, over the person with 69. A similar problem is faced in any decision that results in some individuals being rated "eligible" and others "ineligible." Whatever the selection method, be it supervisory ratings, evaluations of training and experience, interviews, or tests, the difference between the person who barely squeezes through and the person who just missed getting an eligible rating is hard to detect. Yet, these decisions must be made in order to operate a competitive personnel system efficiently. The important considerations are that the decisions be made fairly and that they result, to the maximum extent possible, in the selection of the best available people.

It is true that the importance of tests should not be overemphasized or their use allowed to become excessive. In general, tests are a valuable means of supplementing management's judgment in appraising the capability of employees to move into new lines of work; they cannot become the exclusive evaluating device. *We must always be aware of their limitations as well as their proper uses.* The essential point is that we must make use of every reasonable means available to us to insure that we are choosing the persons with the *right potential* and the *best potential* for any given line of work, whether they come from outside or from within the Federal service.

I am convinced that career potential is the most important qualification factor to be measured for entrance-level administrative or professional positions, and that in the absence of work experience or training in the *same* line of work a carefully devised test is the best means available for measuring this potential.

Mere presence in the service, even in related activities, does not *per se*—without other evidence of capacity—guarantee that an employee is really qualified for a different pursuit. Nor is a record of long service in an organization or on a job a sound means for determining promotability, except where all other considerations among candidates are equal and cancel each other out. As has been said in other places, 20 years of service in one case may be significant, but in another it may mean simply one year of service 20 times repeated.

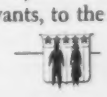
It is equally important that irrelevant considerations, such as race, religion, and sex, be rigidly excluded from any influence on selection or advancement. They have no bearing on job performance or potential. The proper use of standards and of tests is a further guarantee against irrelevant considerations in personnel selection.

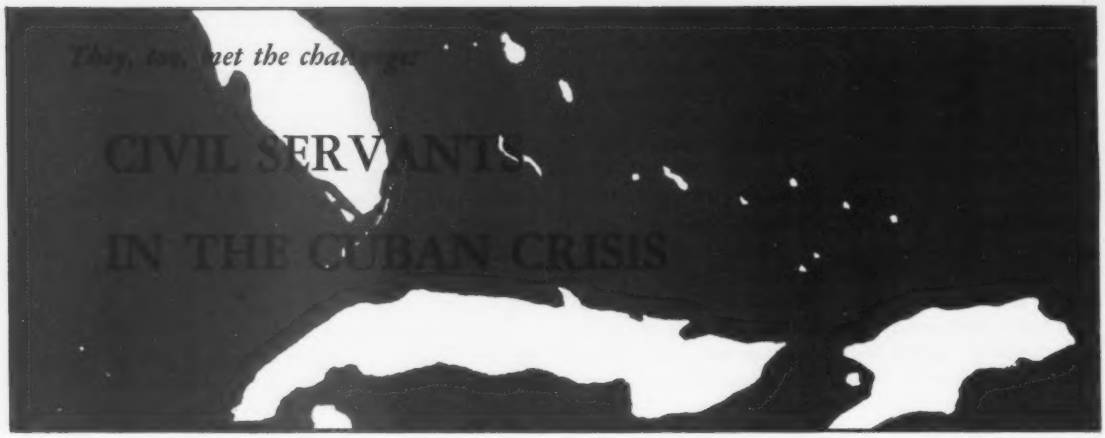
I urge a sense of great responsibility on the part of all supervisors, from top to bottom, in making selections to fill jobs. I fully appreciate the understandable human motivations that may tempt a selecting officer to advance a faithful employee to a higher position or a different line of work even though he anticipates only minimal performance or recognizes that he could do better with another selection. It is always difficult to turn down industrious employees with fine performance records. But in this internationally competitive age, our society cannot survive if we are dominated solely by this compassionate attitude. No Federal manager can afford to be satisfied with less than the best talent he can get to help him achieve his objective in the public interest.

NEED FOR HIGHER STANDARDS

The need is for higher, not lower, standards. In times of intense competition for manpower there are always pressures to lower requirements—to accept less than the best—in order to get candidates or to satisfy the aspirations of the disaffected. Lowering of personnel standards will in the long run mean lowering of program quality. As water seeks its own level, so better qualified people are attracted to organizations that maintain the highest standards in their selection of personnel and in the quality of performance they expect of their employees. (For example, a Commission representative was recently told by officials in commercial colleges that *they refer their best students only to those employers who insist on the highest standards.*)

In the best traditions of our Nation, the Federal civil service offers rewarding career opportunities for qualified citizens and for employees on the rolls. But these opportunities must be opened only to those who have the demonstrated *potential* to perform the challenging assignments in our critically important Government programs. We must make use of every appropriate selection method available to identify and advance those individuals who have the *greatest capacity* for the work to be performed—not necessarily the most education or the most experience, but the most *ability* for the job to be done. We owe this much to our public servants, to the Government, and to the American people.





"LIGHTS WERE BURNING LATE last night in a number of Federal buildings," the Washington Post reported on October 23. The Cuban crisis was in its second day.

Why did the lights burn late and what were career civil servants doing to support the Nation's policy in the Cuban crisis? To find out, a sampling of Federal departments and agencies was made. The information obtained pointed in a single direction: Civil servants were immediately responsive in the Cuban crisis, and their role was vital.

by JOSEPH E. OGLESBY
Public Information Office
U.S. Civil Service Commission

IMMEDIATE ACTION

At 7 p.m. Washington time on Monday, October 22, President Kennedy told the Nation and the world the nature of the situation in Cuba and announced the Nation's plans to eliminate the threat which was present.

Aerial photographs proved, he said, that offensive weapons were present in Cuba. Career civil servants had supported the reconnaissance flights on which the photographs were taken and they had worked around the clock with military counterparts interpreting the photographs.

Civil servants in the Voice of America transmitted the President's message to Cuba and Latin America. The live broadcast was followed immediately by Spanish-language translations, and broadcasts were repeated well into the night.

Voice of America facilities were bolstered as the Federal Communications Commission established a precedent by getting 10 commercial broadcasters to link up with the Voice to provide saturation transmission of the President's message.

News became a most-desired commodity, especially news about military matters and international diplomacy.

Career civil servants teamed with military officials in the Department of Defense to set up and man a "Cuban desk" which handled all incoming queries concerning the crisis. Following the lead of Defense Secretary McNamara, the public affairs people on the Cuban desk stayed continuously at the Pentagon so they could provide 24-hour-a-day service to the working press.

United States Information Agency civil servants followed the President's announcement by sending thousands of photographs to 203 Information Service posts in 107 countries. Photographs included aerial views of the offensive arms in Cuba, the President making his Monday evening speech, his signing of the quarantine proclamation, the proclamation itself, shots of Soviet merchant ships en route to Cuba, and a photograph of Premier Khrushchev embracing Premier Castro.

Navy Department civil servants responded in several ways. Ships ordered to the quarantine area required speedy provisioning and fueling at Norfolk. The Naval Supply Center, sometimes called the biggest store in the world, did a land-office business as civil service and military personnel went on a 24-hour-a-day schedule.

U.S.S. *Enterprise,* the Navy's giant nuclear aircraft carrier, arrived for provisioning. Normally the task would have required 10 hours of hard work, but the word went out: Do it in three. Two-and-a-half hours later the ship was ready to sail.

Civil servants were affected by the order to evacuate dependents from the naval base at Guantanamo Bay. Male employees, given the option of staying on the job or being evacuated, voted overwhelmingly to remain. But of the 2,400 persons evacuated, 160 were civil serv-

ants, some of whom were employed wives of military or civilian personnel.

Those evacuated by aircraft arrived at the Navy's amphibious base at Little Creek, Va., Tuesday afternoon, October 23. Those coming out by ship arrived 2 days later.

Waiting at Little Creek were the industrial relations officer and the district civilian personnel officer from Norfolk. They arranged housing, meals, payment of evacuation allowances, and offered temporary employment to the 160 civilian employees. In the group were 45 teachers who were placed temporarily in research or personnel work pending their return to Cuba.

Rapid buildup of military strength in Florida required extensive air operations, and Federal Aviation Agency civil servants were responsive to the need.

The Navy asked for an air control tower at the Key West airport and 24 hours later it was a reality. FAA civil servants flew in with lightweight communication equipment, set up shop on a rooftop, erected a temporary shelter to protect themselves and their equipment, and began operations.

Other response made by FAA included issuing a special civil air regulation to provide for immediate identification and control of aircraft operations over certain areas of Florida and specified adjacent waters, establishing an Air Defense Identification Zone (ADIZ) plan around the San Juan area, and providing instructions for handling of sensitive aircraft movements.

Within the agency, FAA liaison officers at military commands were placed on a round-the-clock operation. An agency command post was placed in operation and personnel were detailed to it. A plan was established for continuity of operations, calling for three command and control teams, a relocation staff, a line of succession in Air Traffic Service headquarters, and special emergency readiness assignments.

Wherever appropriate, special security measures were taken. Secret Service agents at the White House asked visitors to leave cameras, handbags, and packages on a shelf in a trailer outside. While the visitors walked through the White House, their packages were examined under a fluoroscope as a safeguard against hidden weapons.

Air Force civil servants assisted in the callup of reserve trooplift units who might be needed in the emergency. Among the Air Reservists called to active duty October 28 were career civil servants Hugo Madaus, 66, and William Allen, 67, who were employed at Selfridge Air Force Base, Mich. Both were civilian employees of the reserve unit in 1958 when the Air Force decided that civilians working for the reserves should be members of the units. Offered other assignments, both elected to become reservists.

Civil servants in the Defense General Supply Center near Richmond, Va., responded by helping to fill 97 percent of all 10,000 emergency orders received during the first two weeks of the crisis within hours after the orders were received. At this electronic mail-order clearinghouse for the military services, needed items not on the shelves can be located within minutes at warehouses located across the country.

Fifty-two key career officials in the Department of Commerce, who were placed on a special roster, manned a 24-hour watch in a special communications center. Equipped with beds, a coffee urn, and ample communications facilities, the center served as a command post capable of relaying any message immediately to policy-level officials, or calling upon constituent agencies of the department, such as the Weather Bureau, the Maritime Administration, the Bureau of Standards, etc., for immediate needs.

AREAS OF PREPAREDNESS

The foregoing examples show immediate responsiveness. Equally significant was evidence that plans *in being* were adequate in the time of need.

Months before the crisis, Civil Service Commission manpower mobilization plans had been prepared and sent to Federal agencies to meet any degree of national

". . . DURING RECENT WEEKS, those of us who are not of the career service have had occasion again to be thankful for the career people. I refer not only to those who are expert in particular fields but also to those with the breadth of understanding to be able to apply their special talents to problems involving broad and complex issues going far beyond the competence of any single 'expert'. . . .

"Throughout this time of [Cuban] crisis—and this condition probably is typical—many of our career people were obliged to handle matters well beyond their usual professional scope. Executive Committee members had to call on their immediate professional staffs for extraordinary support. Part of this demand was for the raw material needed to form the foundation for the decisions that ultimately emerged. Professionals were therefore obliged to recognize and deal with the wider implications that usually are the business of the political executive. . . ."

—from address by Deputy Secretary of Defense ROSWELL L. GILPATRIC at Rockefeller Public Service Awards Luncheon, Washington, D.C., December 6, 1962.

emergency. Plans appropriate for a specific emergency could be placed in immediate effect by a signal from Washington.

For example, local military commanders could be given authority to hire, to promote employees, to fix salaries, and to order employees to work overtime if the need arose. Regular recruiting and examining procedures could be suspended.

In existence in the Office of Emergency Management was a roster of executive "reserves," experienced men who could be called upon by Federal agencies to operate emergency programs, control wages and prices, allocate materials, ration scarce items, and administer relief if so required.

The Department of Labor was prepared, if the need arose, to become the Government's central manpower control agency. Two hundred trained field representatives of the Civil Service Commission would work with officials of the U.S. Employment Service to meet the manpower needs of Government agencies.

Interior Department officials reviewed mobilization plans such as maximum use of electric power and the production, refining, processing, transmission, storage, and distribution of petroleum and petroleum products, the production and distribution of solid fuels, and the production and processing of minerals. Preparedness measures appeared to be most satisfactory, but attention was given to areas where deficiencies were brought to light by the Cuban crisis.

Likewise, the Department of Agriculture reviewed its existing plans for national and local food management during an emergency, paying particular attention to assuring an adequate food supply for the Nation and assisting U.S. farmers in their task of producing food.

A quick USDA review of food stocks showed that food supplies available October 22, 1962, were 50 percent greater than supplies on hand when the Korean emergency arose.

Agriculture Department officials held 26 meetings in 5 days to give 10,000 civil servants an understanding of what might be expected under a number of conditions in connection with a nuclear explosion.

Other Federal departments and agencies, large and small, checked their responsibility against their readiness to respond. The scales were balanced, in large measure because of plans which career civil servants had helped to prepare.

ONGOING SERVICES

By Thanksgiving Day, November 22, the crisis appeared to be under control, although there was still tension in the air. The "Cuban desk" in the Department of Defense was still being manned on a 24-hour basis, dependents had not been returned to Guantanamo Bay, and Federal agencies were still looking carefully at their mobilization plans with a view to making improvements wherever needed.

Throughout the crisis, however, the ongoing business of Government continued. Civil servants were responsive to the demands of peace as well as the demands of crisis.

—Staff members of HEW's Cuban Refugee Center in Miami continued their effort to find more jobs and sponsors for Cuban refugees in communities throughout America where the refugees could put their skills to use and build new lives for themselves while in exile from their homeland.

—Civil servants in the Weather Bureau kept fully abreast of the seasonal peak workload in monitoring hurricanes which form in the Caribbean area. They employed aircraft reconnaissance, *Tiros* satellite reports, and the Bureau's network of high power radar stations to gather facts which were used for keeping citizens informed.

—NASA launched a 90-pound satellite to study radiation in space.

—A panel of eminent scientists was appointed by the Department of Health, Education, and Welfare to study the relationship of tobacco to health.

—Civil service scientists at the National Institutes of Health continued their studies, seeking ways to improve man's health and extend his lifespan.

—Interior and Navy Department civil servants stationed in Guam pitched in to help provide relief for victims of typhoon Karen which struck Guam with winds of 172 m.p.h., destroying 9 of every 10 houses on the island and inflicting $100 million in property damage.

—Civil servants in Veterans Administration hospitals provided treatment and care for 110,000 hospitalized veterans.

—Federal Housing Administration mortgage experts continued to process applications for the purchase of private homes.

—Civil servants in HEW continued to mail out benefit checks at the rate of 18 million per month.

—Department of Agriculture researchers at Beltsville, Md., continuing their search for better foodstuffs, announced success in breeding grandfatherless turkeys from the same stock as USDA's famed "Beltsville small white" turkey which has been on the market for some time.

HEALTH BENEFITS—

(continued from page 8.)

cies. Under these circumstances, are the differences in the plans—in terms of protection offered and premiums charged—significant enough to justify the existence of so many of them?

Another problem: how best to meet the increasing dollar drain that will be placed on the program as, with time, the ratio of covered retirees to active employees increases? One of the basic principles on which the program was founded is that retirees and their families will be provided the same benefits, and at the same premium rates, as active employees, even though actual costs of providing them those benefits are much higher. However, no funds are earmarked for that specific purpose. There are a number of different approaches—each with definite advantages and disadvantages—that could be followed. Any approach that would compromise the principle will be rejected automatically—but which approach will *best* accomplish the purpose?

Still another problem which directly affects the program (over which it has little or no control) is the spiraling cost of medical care throughout the Nation. Regardless of what is done or not done about this situation, if costs of *this* program are to be kept within bounds—

- *Employees and their families must not press for hospitalization for simple convenience* or "to get a rest," nor demand brandnamed prescription drugs which are more expensive but not more effective than those not branded, nor otherwise misuse the protection they have bought.
- *Doctors must resist demands for unneeded medical, surgical, and hospital services;* must accept reasonable fees, not increased *because* the patient is insured; and must continue to discipline any of their colleagues who overcharge or otherwise take advantage of the insurance.
- *Employees should discuss a fee with the doctor—in advance,* whenever possible—and reach some agreement with him about the charge to be made and about its reasonableness. Such discussions can help prevent the occasional misunderstandings which occur.
- *Hospitals must bill accurately,* reasonably, and only for those services actually provided.
- *Carriers must exert constant effort* to hold down administrative costs and all other expenses that would divert premium dollars from actual benefits.

If all of this is done, the protection afforded by the program will not be devalued, and it can continue to serve its purpose.

The objective of the Commission, and the focus of all its health benefits effort, remain the same as when the program began: to insure the maximum service and protection for every available health benefits dollar.

ADP Billboard

A committee to provide the Government with another method for exchanging information on the use of ADP in personnel management was established within the Interagency Advisory Group last September. Twenty-three Federal agencies are represented on the committee.

Called the Committee on ADP for Personnel Management, it anticipates identifying and resolving additional common problems and achieving a greater degree of standardization in approach to the use of ADP in this area. Agencies just starting to automate will be able to capitalize on the experience of agencies already well down the "automation road." Even agencies with considerable experience in automation are not without problems, and their participation on the committee facilitates the exchange of ideas and methods which will assist them in implementing their programs.

Work groups have been established on standard abbreviations, coding, standard forms, and reporting requirements. Additional work groups will be established if special needs are identified.

With the assistance of the committee, the Civil Service Commission is developing standard policies and procedures which will eliminate the need for each agency to request exceptions when it starts to automate. To date it has been determined that ADP output can be used in lieu of Standard Form 7 (Service Record Card); that ADP can be used to maintain all the information necessary for the retirement records of employees on duty, so that Standard Form 2806 (Individual Retirement Record) need be prepared only at the time of separation or transfer; that titles for "Nature of Actions" can be reduced in length; and that modifications of Standard Form 50 (Notification of Personnel Action) can be made to permit production with ADP equipment.

The Department of Agriculture, the Bureau of the Census (Department of Commerce), and the Bureau of Ships (Department of the Navy) are all testing the use of ADP output in lieu of Standard Form 7. The Bureau of the Census and the Department of Agriculture are preparing to provide the Commission with Standard Form 50 data through compatible magnetic tape.

If operational experience demonstrates, as we anticipate it will, that ADP can perform these and other functions effectively, guidelines will be issued for the use of all agencies. In that event, the need for requesting specific exceptions on forms, files, and reports each time an agency automates will be eliminated.

—Leonard W. Johnson

MANPOWER—

(continued from page 14.)

beyond the high school diploma. While men of lesser training can be usefully employed in its processes, the creation of new industry, new products and devices, new methods and applications from the new technology arises from the creative and imaginative insights of scientific and technological leaders who have access to the very limits of knowledge.

So I would make the point unambiguously: No training of numbers at the trade-school, high school, or college level can in itself capture the new technology. The key to the new technology is derived from the boundaries of knowledge—from training at the doctoral level and beyond. Those communities that can produce and retain men of advanced education will have access to and control of the new technology from which the industry and wealth of the future will flow.

At the Governor's Conference at Minneapolis early in March 1962, leaders of industry, of education, and of government met to appraise the leadership that a great graduate university can give to the community. Governor Anderson pointed out sharply that the industry derived from the new technology had grown from one or two million dollars annually in 1950 to $770 million annually in 1961, to become Minnesota's fourth largest source of endeavor. This is graphic demonstration of the power of the new technology. In a mere 11 years, from the unparalleled intellectual leadership provided by the University of Minnesota, employment for nearly 100,000 Minnesotans had been found, representing the welfare of nearly a half million persons. But even with this remarkable performance, Minnesota is producing only one-fourth of the highly trained leaders needed to develop its requisite industrial base.

In a mere decade, the interaction between the graduate school and industrial growth and community welfare has grown very strong. I ask you to observe the new industrial complexes around Stanford University where 10 years ago were mere green fields. Or look at Route 128 around Harvard and MIT, or the aerospace industry around Cal Tech and UCLA to see the portents of the future.

Because of this technological revolution that began about 1950, the graduate university has suddenly been brought to the very focus of future community welfare. The graduate school must provide the technological leaders and the ideas from which industrial employment and community happiness must flow. The university is no longer a desirable appendage to community life; the university today must be at the very center of community development; it must work as an integral part of the community if society is to survive as a productive and happy group of citizens.

So I would summarize by asserting that no great urban community can remain viable in the future without immediate access to at least one great graduate institution of advanced learning. The reasons are multifold:

(1) The production of men of advanced learning to manipulate the new technology, bringing it to the service of the community.

(2) The opportunity for men of science and technology to retread and advance their skills in the face of a rapidly evolving science.

(3) The need for a center of advanced intellectual integrity around which the technological needs of the community can be rallied.

Clearly, those populations which are served by adequate graduate facilities have the edge on the others in this age when technology gives supremacy. With a good graduate school nearby the advanced industry of tomorrow has several times the probability of locating in the community.

So today, as a consequence of the technological revolution, new centers of power are destined to appear. These centers of community power will arise in those areas where institutions of graduate education can provide the brainpower required to generate advanced industry and the consequent community strength and wealth, employment, and happiness that flows from it.

From these centers of educational strength and technological power must inevitably flow a new form of colonialism. Just as the industrial revolution produced a colonialism stemming from the centers of manufacture, so the technological revolution of today will produce a new colonial dependence on the community sources of brainpower from which the new sources of economic control will inevitably arise.

In this new colonialism, management with their research laboratories will center near the great universities. For accessibility to and immersion in ideas is the key to successful management in the future. No longer are labor, land, or water supply the central concerns in locating the headquarters plant. Instead, accessibility to brainpower takes first place. Removed from the centers of brainpower, the less fortunate communities must console themselves with branch plants and services operated, administered, and manipulated by some distant management.

Since graduate education has suddenly become the key to industrial development and community welfare in this technological age, we are led to inquire of its adequacy and its geographic accessibility.

In 1959, for example, 9,400 doctoral degrees of all kinds except medicine and law were earned in the United States. Two-thirds of these degrees were granted in 10 States which have 40 percent of the U.S. population.

These States produced an average of more than 85 Ph. D.'s annually for each million of their population. They are:

State	*Ph. D.'s annually per million State population*
Massachusetts	140
Connecticut	121
Wisconsin	95
Iowa	90
New York	89
Indiana	88
Illinois	74
Minnesota	70
Michigan	62
California	59

Likewise, two-thirds of all doctoral degrees were granted by the 20 leading universities, 18 of which are in these 10 States. Without question, these 10 States, and 20 leading universities, completely dominate U.S. graduate education. If we add Ohio and Pennsylvania, the 12 States with half of the U.S. population and the 20 leading universities produce more than three-fourths of all U.S. doctoral graduands (though Ohio and Pennsylvania average only 42 Ph. D.'s annually per million population). The remaining 38 States with the other half of the population produce only one-fourth of the U.S. doctoral graduands at a rate of a little more than 30 Ph. D.'s annually per million population.

This is a striking contrast: 10 States producing doctoral graduands at nearly 3 times the rate of the remainder. Nor do students migrate much from the 40 to the 10 States. Last year fewer than 1,000 Ph. D. graduands went more than 500 miles from their homes for their graduate studies. Thus, a resident of Texas, for example, has only a little more than a third the probability of receiving a doctoral degree as a resident of Massachusetts or New York. *The central point is that students do not go to the graduate school in large numbers unless the graduate school is reasonably accessible to them.*

The contrast among metropolitan areas is even more striking. Compare Boston having 600 Ph. D.'s annually, or San Francisco having 500, or Los Angeles or Detroit having 300, or Minneapolis-St. Paul having 250 with Houston, New Orleans, or Oklahoma City having 40, or Dallas-Fort Worth having 6, or Phoenix with none. Or compare a rural university like Cornell at Ithaca having 225, or Illinois at Urbana having 350 with the only substantial graduate university in the South and Southwest, Texas at Austin, having about 150. These contrasts may be bitter, but they are too critical to ignore in the face of the oncoming technological revolution. We simply must face the facts realistically.

Since we think of colonial dependence as bad for a community, we can set up centers of graduate learning within the community to avoid it. So we ask ourselves, "Just what is necessary?" As a guide, we turn to those communities where graduate education is well developed.

Let us look first at university size. Among the top 20 graduate universities, i.e., the 20 that produce two-thirds of our doctorates, the number of doctorates granted per year ranges from some 600 at Columbia to about 200 at Michigan State. The big schools, like Columbia and Berkeley, are perhaps near maximum reasonable size because of organizational management problems. Universities granting fewer than 150 doctorates per year, with two or three outstanding exceptions, tend to be strongly undergraduate-oriented, with graduate education taking second place. Moreover, the top 20 are not only the largest but by many are also considered among the best. So the optimum size for an excellent graduate university designed best to serve the needs of the community seems to fall between Harvard with 325 and MIT with 200 doctorates granted per year—let's say 250 on an average.

Since our objective should be about 100 doctorates annually per million population, how many good graduate universities do we need? For the whole United States with 190 million population this means one for each two and one-half million, or some 75 good, substantial graduate schools. This is a lot more than 20.

How many good graduate universities producing more than 200 Ph. D.'s annually do we need in a typically changing region like the Southwest? With its 20 million people, we should have at least 10, and by the time we could build them up, we will need 20. We can note here with some satisfaction that there are now 20 graduate universities in the Southwest giving some doctoral training. So the task at hand is to build these universities to adequate size and at the same time to maintain first-rate graduate quality to serve their community needs in this technological age. If this job can be done then every great metropolitan area in the Southwest would be served.

What stands in the way of accomplishment of these goals? To answer would take a volume, but consider a few major factors:

(1) *Student support*—the diminution of engineering graduates from 52,000 to 32,000 in the decade, following the termination of the GI Bill, stands as mute evidence that financial support to students could double or treble the supply of advanced students.

(2) *Student motivation and orientation*—the orientation and motivation of students at the high school and elementary levels toward aspiration for an intellectual career, with its spiritual as well as economic advantages, is almost wholly absent in major geographic areas.

(3) *University orientation*—except for the big 20 and a few others, most American universities are undergraduate-oriented. They tolerate a minuscule graduate school as an expensive and unhappy appendage. Their faculties are underpaid and often second rate, their research facilities negligible. They make no attempt to recruit or develop a modicum of intellectual leaders for their faculties. So university orientation, planning, and development is imperative.

(4) *Money*—most universities beyond the big 20 are in financial straits. This is partly due to failure of the public to realize their key role in the community, and even more due to failure of the universities themselves to assume the role of leadership when advanced education has become crucial to their community welfare.

(5) *Teachers*—with the onset of the technological revolution, industrial and governmental demand for Ph. D.'s, which was previously negligible, is now draining our university faculties. Facilities for post-doctoral training to resupply university faculties has become urgent.

So we have ahead the complex task, out of the undergraduate-oriented universities at hand, of building, staffing, and filling of some 50 more major graduate institutions, equal to the big 20 of today. This cannot happen by accident. We should not forget that we had 10 great graduate institutions producing most of our Ph. D.'s in 1920, 20 in 1945, and still 20 in 1962. Things have gone seriously awry at the most critical stage of our development.

But beyond the problem of community welfare is the problem of national survival. We must recognize that in this world struggle against communism, military force is at a standoff. Military power, if kept effective, can prevent military aggression, but by itself cannot win the struggle when fought on other levels. So the Soviets ask, "If we can't lick them on the battlefield, where else might we win?" They turn naturally to the powerful new technology to capture its power for their side. This is the real significance of Sputnik and its progeny. The battlefield is not the only medium by which nations can be overwhelmed—with military stalemate, the battle has gone to the intellectual level.

After a careful study sponsored by our Federal Government, the expert in Soviet education, Dr. deWitt, finds that this year the U.S.S.R. will graduate 190,000 in science and engineering, as contrasted to 90,000 in the United States. About the same ratio holds at the graduate level. How long can we stay ahead in light of this performance?

So our whole population must be given the opportunity to contribute to the full extent of *our* intellectual capability. Instead of thrashing around noisily, we can better focus our effort on keeping our technological superiority which has been challenged by Sputnik and all it symbolizes—a superiority that is essential to winning the battle where it really counts. This means that every section of the country must contribute its part to the advanced education of its people. The dangers inherent in the intellectual battle are especially critical, for the new science makes possible not only industrial superiority but also extraordinary technological breakthroughs that might have grave military significance.

PRESIDENT'S COMMITTEE URGES ACTIONS TO IMPROVE SUPPLY OF HIGHER SKILLS

Worsening shortages of highly trained scientists, engineers, and mathematicians threaten the fulfillment of vital national commitments, according to a recent report of the President's Science Advisory Committee. To alleviate these shortages, the group recommends a concerted program to expand the Nation's capabilities in graduate education and training, and to encourage a larger proportion of college graduates in these 3 fields to go on to advanced study.

The Committee proposes goals of 7,500 Ph. D's per year and 30,000 master's degrees in these 3 fields by 1970. Other goals are to strengthen existing centers of education, and to develop new ones with wider geographical distribution. The Committee recommends a program linking Federal and private efforts to lend financial support to graduate students, to universities, and to new facilities.

LET US SUMMARIZE THEN the major social forces at work that must inevitably shape the course of our future in these explosive times. I would do this in nine successive thoughts:

(1) An oversaturation in numbers of people who can gainfully be employed in agriculture and in exploitation of natural resources.

(2) An exploding population.

(3) Transformation of our community from predominantly rural to almost totally urban as the added population settles in and migrates to the major cities.

(4) A demand for industrial opportunity to gainfully employ the excess population, whereby they can produce new products, services, and opportunities for the benefit and welfare of all.

(5) The coincidence of this social transformation with a technological revolution that provides a new, more efficient, more functional origin for industry arising in the realm of the most advanced scientific ideas of our time. (over)

(6) A new technological power from our new science that is rapidly rendering obsolescent our old "practical" technology, so that to capture new industry we must broadly command the most abstruse scientific thought of our time.

(7) A consequent dependence of the community on graduate education, the opportunities of which must now be enlarged to provide men who in sufficient numbers can command the new technology on our behalf.

(8) The capture of the new technology as the main objective of the forces of both East and West during military stalemate, with the outcome determined by the success of one system over the other in dominating the new technology, and acquiring the technological dexterity, capability, manipulative skills, and industrial efficiency that constitute world leadership.

(9) The inevitable rise of a new and more general form of colonialism stemming from the centers of brainpower which have had the foresight to capture the new technology for their benefit.

We cannot block these forces that shape the future; we can only work with them to turn them to our benefit.

I would conclude by reasserting that graduate education of adequate numbers and with suitable geographic distribution among urban populations is the key to the future. I have stressed training at the doctoral level and beyond since skills of this order are essential to the release of the technological benefits that science holds today. But with the release of this new technology, we will need 20 at the bachelor's level for each doctoral degree, and 30 at the technical level for each bachelor's candidate. Our educational objective in support of our economic health must be the advancement of each member of the community to the limits of his intellectual capability. This is the demand imposed by the technological revolution of today.

Our basic problem ahead is to maintain a system of free economy and free enterprise in the face of these powerful new socioeconomic forces. Lesser peoples will fall before the totalitarian methods of the planned state enforced by police rule. Our challenge is to maintain individual freedom and economic progress too.

As the great philosopher, Alfred North Whitehead, has cogently remarked:

> *"The art of progress is to preserve order amid change, and to preserve change amid order. The more prolonged the halt of some unrelieved system of order, the greater the crash of the dead society."*

SALARY REFORM—

(continued from page 3.)

goals. One feature deserves particular attention because it is a companion incentive to meeting the acceptable level of competence. It is the authority to grant extra within-grade increases for high quality performance. Conformance with Civil Service Commission regulations is required before this incentive can be used.

Lack of a simple means to give financial recognition for high quality performance, and resort to an automatic within-grade increase, encouraged an employee attitude of "what's the use?" This condition strengthens the dead hand of uniformity and in turn encourages mediocrity. As an employer, the Government should resist the concept of uniformity with its handmaiden of mediocrity. Although we may expect everyone to measure up to certain standards of proficiency which the identical task requires, it does not follow that all who do should be treated the same. Those whose talents enable them to exceed the standards should be rewarded. I think this is not only a consistent employment practice but a practice essential to the challenge of our times.

Judicious use of this authority to grant financial reward should be encouraged by management. It is an extremely valuable device to combat the leveling effect of a "treat everybody the same" attitude and to motivate employees to perform at full capacity.

However, important as these pay reforms are, they in themselves will not solve all our problems. Management must still manage. And part of managing is the correlation of all the tools available to achieve the specific goals desired. Good human relations, developing a cooperative work team, being interested in employee problems, providing the right kind of organizational structure, eliminating the procedural roadblocks and frustrations—all of these things in combination are essential to achieve maximum performance and productivity. I think not only greater efficiency and productivity can be achieved but that great strides toward economizing can be made if we closely tie in the pay reforms with other important features of our personnel system.

EXECUTIVE ORDER 11073, dated January 2, 1963, directs Federal agency heads to use all authorities in the Salary Reform Act to: (1) secure and maintain the high quality of Federal personnel, (2) motivate employees to perform at full capacity, (3) provide employees fair treatment in pay matters, and (4) ensure that Government receives full value for employee salaries. Other provisions require an annual review of comparability of Federal salary rates with those in industry; give CSC authority to make salary adjustments for hard-to-fill jobs; and require an annual report to the President on the 4 statutory salary systems covered by the Salary Reform Act.

LEGAL DECISIONS

REDUCTION IN FORCE; LENGTH OF SERVICE

Bilanow v. *United States,* Court of Claims, November 7, 1962. Plaintiff's suit was for the salary he would have received from August 31, 1953, the date of his separation in a reduction in force, until August 2, 1954, the date of his next gainful employment.

The agency, anticipating a cut in appropriations, made up retention registers in June. Pursuant to the Commission's regulations, each employee was given one credit for each full year of service, and half years of service were added in the event of ties. Under this procedure, plaintiff and two other employees in the same competitive level were tied with 10½ points, as of June 30. Plaintiff was selected for separation. His notice was dated July 31 and was effective August 31. On July 11, plaintiff completed 11 years of service. If service were computed as of either July 31 or August 31, he and one of the other employees would have been tied with 11 points; the third employee would have had only 10½ points and would have had to be separated. The agency refused to recompute the service.

The court held that the agency's refusal was arbitrary, capricious, and without any foundation in law and awarded judgment to the plaintiff. The court held that it was within the spirit of the regulations to have the agency look again at the tied employees' service on the date the notice was issued. Moreover, the court said there was a violation of a clear mandate of the R–3 chapter of the Federal Personnel Manual, which reads:

"The order of standing on a retention register on the date of the issuance of an employee's notice of action by reduction in force is controlling as to the rights of the employee throughout the period specified in the notice, except that the retention register and actions taken on the basis thereof shall be adjusted to reflect:

(1) The correction of any error of fact (such as the service credited, * * *) in the register at the time the notice was issued * * *."

REEMPLOYMENT OF ANNUITANTS

Boyle v. *United States,* Court of Claims, November 7, 1962. This is a case in which an "expert or consultant" hired by contract for intermittent service was held *not* to be an employee. Plaintiff continued to perform services for his agency, under a contract, after he was retired because he had reached the mandatory retirement age. The amount of his annuity was deducted from the payments that the agency made to him. He sued for the return of the amounts deducted on the ground that he did not hold an "appointive or elective" position within the meaning of the provision of the Civil Service Retirement Act that authorizes these deductions. In deciding that the plaintiff was an independent contractor rather than an employee, and thus entitled to a refund, the court made these points:

- The contract specifically provided that the arrangement would be "that of attorney and client on a contract or fee basis" and would not be "an appointment."
- Although payment was on a per diem basis, plaintiff was actually being paid for the accomplishment of a specific result.
- Although under his previous employment plaintiff reported for work regularly and worked regular hours as required by regulation, after he entered into the contract he came to work when he saw fit and kept no regular office hours.
- As an employee, he worked under general supervision and his work came to him through established supervisory channels. As a contractor, his case assignments did not flow through established supervisory channels and the matters on which he worked and the results were entirely within his own unsupervised determination.

CONTINUING CLAIM THEORY

Friedman v. *United States,* Court of Claims, November 7, 1962. This is a military retired pay case. The facts and the decision are not generally important. What is significant is the court's opinion which reviews prior decisions in which the court applied and did not apply the continuing claim theory and in which, of interest for our purposes, the court definitely closes the door on application of the theory to adverse personnel action cases.

The continuing claim theory has been applied to pay cases. In the language of the court, it means that "the cause of action for pay or compensation accrues as soon as the payor fails or refuses to pay what the law (or the contract) requires; there is no other condition precedent to the accrual of the cause of action (such as a factual determination by an executive tribunal or the exhaustion of some special procedure or remedy). And where the

RECRUITERS ROUNDUP

What actions should the Federal Government take to improve its image on the college campus and to develop closer working relationships with the colleges?

This question was discussed by a 4-man panel of college presidents at the Washington Agencies Recruiting Conference meeting in Washington last September. The panel was comprised of: Dr. T. Marshall Hahn, Jr. (panel chairman), President, Virginia Polytechnic Institute; Dr. O. Meredith Wilson, President, University of Minnesota; Rev. Edward B. Bunn, S. J., President, Georgetown University; and Dr. Robert P. Daniel, President, Virginia State College.

The following action items were suggested by the panel:

- Efforts should be made by the Federal Government to elevate the image of its executives to the same level achieved by business and industry for theirs.
- Agencies should publicize the Federal careers of successful college graduates to implant among students an awareness of the professional nature of the career service.
- Recruiting at minority group institutions should be accomplished with the same attitudes toward students and officials that are exhibited at all other colleges and universities. Any patronizing, insincere attitudes are out of place and preclude attracting the quality graduate, or in establishing beneficial relationships.
- Greater emphasis should be placed upon the worldwide scope of the challenge, achievement, and recognition found in Federal service.
- More programs should be initiated to develop greater faculty appreciation for the professional aspects of the Federal service. Cooperative college-Federal agency seminars were given as an example of a good start in this direction. Broadening this channel of college-Federal communications to include university executives will also make the latter group more keenly aware of the necessity for staffing Federal programs with quality personnel.
- Political science and public administration departments of colleges and universities are natural focal points for developing other programs of college-Federal agency cooperation, and should be utilized fully for this purpose.
- Coordinated recruiting efforts by several agencies having common recruiting needs serve well the effort of agencies to reduce confusion among students about the many Federal recruiting programs, and should be continued.
- Federal career days have been notably successful as one type of coordinated recruiting. Their potential for relating the challenge, importance, and scope of Government activities should be more fully developed.

For the improvement of single agency recruiting programs, the panel made several suggestions. They were: (1) Tailor the recruiting effort to the features of each campus; (2) develop recruiters who are knowledgeable about the needs of the agency they represent and are able to provide answers to questions that arise concerning opportunities that exist in other agencies; and (3) use only representatives who are personable, well-groomed, and persevering in presenting the career story.

The college executives asked that the Federal Government continue to strive for excellence in its selection process. They mentioned that a contribution to attracting quality would be the streamlining of the examination process, particularly in the reduction of time between interviewing and hiring.

—Robert F. Mello

---

payments are to be made periodically, each successive failure to make proper payment gives rise to a new claim upon which suit can be brought."

It would be interesting to speculate as to the effect of the application of this theory to claims for pay arising out of an alleged illegal adverse personnel action. The opinion, however, makes it clear that the continuing claim theory does not apply. Instead, the court applies a "second principle" and this "recognizes that in appropriate cases conditions precedent to the accrual of a cause of action can be established by statute, contract, or common law, and that where such a condition precedent has been created the claim does not ripen until the condition is fulfilled." The court applies this principle to "adverse personnel actions against Federal employees (refusal of appointment to the Federal service; discharge, separation, dismissal, or removal; refusal of reinstatement; reduction in grade; compulsory retirement)." The opinion goes on to say: "In those cases the court has recognized that Congress has entrusted the administrators with a large measure of discretion and has in effect established an executive agency as the primary tribunal for determining whether certain adverse action should be taken against the employee. Accordingly, the court has not applied the 'continuing claim' theory but, instead, has viewed the entire cause of action as accruing once the appropriate agency has finally acted."

—John J. McCarthy

QUOTABLE:

A BUSINESSMAN LOOKS AT OUR FOREIGN SERVICE

by Charles D. Lewis, *The Diplomat,* A national magazine, September 1962. Copyrighted. Reprinted in *Readers Digest,* November 1962, under title of "We Can Be Proud of Our Foreign Service." Excerpts reprinted by permission of Diplomat Publishing Company, Inc., Washington, D.C.

The author, president of a tobacco company, was invited to serve as one of the six public members on the 1961 Foreign Service Selection Boards. Before leaving for Washington, he was admonished by his business friends to "fire half of the sons-of-guns." He promised to do his best, and this is what happened.

♦ . . . A few days later I was sitting at a stark metal table in an office of the State Department, with the other members of the board. Piled before us were 357 folders with FOREIGN SERVICE PERFORMANCE stamped on them in big red capitals. These were the confidential personnel files on Foreign Service officers.

I eyed the files hesitantly, wondering what shocks they would contain. And they did contain some shocks, at least to my ideas of the Foreign Service. Later, I found that all the other public members had suffered a similar blow to their cherished conceptions.

When we compared notes, we found that the main ideas we had come to Washington with were these:

IDEA: *"Let's face it, the diplomatic life is pretty soft."*

The files quickly dispelled that illusion for all of us, for good. Foreign Service officers regularly and cheerfully take their families to live for years in places where I would hate to go on a one-day business trip. On the average, they spend at least one out of every three years of their overseas service at a "hardship post," which means they live in communities with no organized sanitation, no sewers except open ditches, no pest control. It means they rub shoulders daily and hourly with dysentery, sleeping sickness, yellow fever, hepatitis and many other diseases; often the nearest adequate hospital facilities are more than 1,000 miles away. It means they lack schools for their children, do without dentists, boil their drinking and cooking water, and wash their food with potassium permanganate.

Disease is not the only hazard. A memorial plaque in a State Department lobby is a reminder: "William P. Boteler, killed by grenade, Cyprus, 1956. Robert Lee Mikels, burned to death attempting to save lives, Korea, 1951. Douglass Mackiernan, killed by gunfire, Tibet, 1950." And so on, down a long list of FSO's who have given their lives to get the job done . . . .

IDEA: *"How are we going to fight the cold war in any foreign country when our Foreign Service people can't even speak the language?"*

I'd often heard this one, and it made sense to me. Yet all the FSO's whose files I went through spoke at least one foreign language well; some spoke more than one, and a high proportion were studying to increase their skills. In non-English-speaking countries where the other major "world" languages (French, German, Spanish) are spoken, the majority of our Foreign Service officers speak the language. And in the Soviet Union virtually all our officers speak Russian . . . .

IDEA: *"Don't do anything, so you don't make any mistakes—that's the way to get ahead in the State Department."*

I now know how little truth there is in that idea. There is only one way to get ahead in the Foreign Service: be picked for promotion by the impartial Selection Boards of experienced men who make their decisions on the basis of a man's complete record of service, in voluminous and revealing detail . . . .

The State Department asked us not only to pick out officers for promotion but also to pick out a certain percentage to let go—the men and women who had reached their peak and stopped growing. This presented unexpected difficulty, for most of these people were competent, experienced officers. In my business, I wouldn't dream of letting employees of that caliber go. The other board members felt the same way. Our final report strongly recommended to the State Department that it find a way to make use of this valuable manpower, perhaps outside the Foreign Service.

Long before I finished my 3½ months' work, it was clear that over the years I had accepted a number of false ideas about the State Department and its personnel. I discovered that 6,000 to 8,000 young men and women apply for the Foreign Service every year. They have to pass stiff examinations, both written and oral. In the end, only about 200 of them are accepted.

The FSO's are virtually all college graduates, and more than half have done or are doing postgraduate work. The Foreign Service invests an estimated six percent of its manpower in full-time training of some kind every year . . . .

At the end of our work, the six public members of the boards went to see Secretary Rusk and handed him a letter, which was later forwarded to President Kennedy. I quote here the last paragraph:

"We are proud of these men and women of the Foreign Service. As American citizens, we want to strike a blow on their behalf against poorly informed criticism,

and we feel it a privilege to convey to you our sincere praise of their abilities and accomplishments." ♦

OLD HANDS AND NEW IDEAS

—from NEWSWEEK, October 8, 1962. Reprinted by permission.

♦ Maxime Faget is a slight, diffident scientist assigned to the Manned Spacecraft Center. His work is unknown except to his colleagues. Yet, more than any astronaut or government official, he made possible the U.S. manned space flights, for he is the principal designer of the Mercury capsule.

Now 41 and a career civil servant, Faget joined the Langley Research Center of the old National Advisory Committee for Aeronautics in 1946. In 1958, he settled a debate among aeronautical engineers over the proper design for a small manned spacecraft. The Air Force was pushing hard for a winged spacecraft, while Faget argued for the blunt-end design, without lifting surfaces. "We hit upon it during a systematic investigation of various reentry shapes. It seemed so obvious we wondered why nobody had thought of it before," recalls Faget, who went on to invent the escape tower and many other flight systems for the Mercury and Apollo spacecraft.

Many other important—and unheralded—contributions to the space effort have been made. Some were purely analytical, such as the proposal for Lunar Orbit Rendezvous (LOR) by Dr. John C. Houbolt, a top-ranking aerodynamicist at Langley. Household mechanic by avocation, Houbolt commenced work on the Apollo rendezvous in 1960. By using theoretical analyses, he discovered that he could greatly reduce the power needed by dividing the Apollo unit into a landing unit and a mother ship which would stay in lunar orbit, instead of landing it all on the moon. "In my opinion, LOR was 10 percent design work and 90 percent sales work," Houbolt recalls. "It finally won out—and there is satisfaction in that, even if you can't patent the idea."

It was H. Julian Allen who conceived the blunt nose-cone shape for U.S. ballistic missiles, the design breakthrough which made it possible for missile warheads to plunge into the atmosphere without burning up. "All I used was a pencil and a scratch pad for the calculations," Allen, who joined NACA in 1936, recalled last week at the Ames Research Center near San Francisco, where he is assistant director. "Aeronautical engineers were always seeking the lowest drag (the least resistance to motion). It was a big jolt when the mathematics proved that the highest drag was the proper design. When I finished and had the blunt nose-cone concept, I thought I had made a mistake, but when I went over it, it all became clear."

Allen, at 52, earns $18,500 a year in his NASA post and doubts he would ever have been allowed to develop the blunt nose if he worked for industry. "Although the pay isn't as good, I like the working atmosphere, and we have all the equipment we need," he explains. "In industry it would be different. Industry makes a product." ♦

THE PRODIGIOUS POST OFFICE

by Eli Waldron, HOLIDAY magazine, December 1962. Excerpts reprinted by special permission from HOLIDAY, copyright © 1962 by The Curtis Publishing Co.

♦ Very early every morning except Sunday, a blue-uniformed army of 124,000 men and 74 women, many of them with flat feet, some of them bearing scars of old dog bites on their legs, shuffle forth on the more-or-less swift completion of their appointed rounds. These are the nation's letter carriers, each of whom, in the words of Will Hays, Postmaster General during the Harding administration, is the Ambassador of Uncle Sam to the American Home. An additional 31,000 rural carriers daily extend this ambassadorship from the city to the country, and both groups of mailmen are backed up by yet another army of 433,000 men and women whose work is largely unseen and unknown.

The whole comprises one of the largest civilian organizations in the world, performing perhaps the most efficient service operation in the history of man. Operating out of 35,000 post offices scattered about the country, it involves the use of 44,000 vehicles and annually handles sixty-seven *billion* pieces of mail, two thirds of all the mail handled in the world. New York City alone handles more mail per day, thirty-four million pieces, than the entire British postal system; proof of its efficiency is the fact that New York City has only 40,000 postal employees compared to Britain's 170,000. The British system has sometimes been called the world's most efficient, but this is evidently open to debate.

In addition to its regular service, manifested each morning on the American doorstep by the arrival of the mailman, the Post Office Department distributes certain types of mail free to the blind and gives reduced rates to religious, charitable, educational and other nonprofit organizations. It delivers seeds, bulbs and cuttings at reduced rates and gives free, countywide distribution to a large number of weekly newspapers.

It also performs a number of services that have nothing to do with the mail. It registers three million aliens a year for the Immigration Service; it makes a yearly census of livestock for the Department of Agriculture; it issues migratory-bird-hunting stamps for the Department of the Interior, small-boat stamps for the U.S. Coast Guard and property transfer stamps for the Bureau of Internal Revenue. It handles income-tax and census forms and gives information on Peace Corps examinations . . . . ♦

The People and the Public Service:

THE PARTNERSHIP THAT WON THE WEST

Part II

by JAMES C. SPRY
Public Information Office
U.S. Civil Service Commission

and

HARVEY H. SHAPIRO
Bureau of Land Management
Department of the Interior

BY 1848 A FEW WAGONS had traveled across the vast western country, already called the Great American Desert—the land explored by John Fremont. In faraway California, recently annexed from Mexico, a few villages sprang up, populated mainly by people who had been Mexican nationals. San Francisco was one such village. Sutter's Fort, at the California end of the trail from the East, was the only American stronghold in the territory. And, not many people from the East were attracted to the faraway land. There was ample land along midwest rivers to satisfy anyone who wished to purchase a homestead.

One magic word changed that—gold! Like a yellow fever, spreading many times faster than the real disease, the word of the discovery in 1848 at Sutter's mill reached the East. The word was on everybody's tongue and on every editor's page one.

A newspaper in an Indiana village, for example, reprinted an item brought east in a San Francisco paper, but advised the people to pay no attention to such reports which couldn't possibly be true:

"The streams are paved with gold—the mountains swell in their golden girdle. It sparkles in the sands of the valleys—it glitters in the coronets of the steep cliffs."

The people did pay attention to such reports—even though they were obviously exaggerated. The only way to find out, of course, was to go and see for oneself.

The *Pocket Guide to California* became a best-seller overnight, and St. Joseph, Mo., became a sudden boomtown as the jumping off point for wagon trains to the West.

THE WORD REACHED EUROPE and the second great migration to America began. There were three ways to get to San Francisco: overland by wagon train; by ship around the Horn; or by ship to Panama, overland across the Isthmus, and thence to San Francisco by a second ship waiting on the Pacific side. All three routes were filled with hardships and dangers—yet westward the people went, hundreds of thousands of them.

The "yellow fever" destroyed many lives; it built several hundred fortunes; it created the new State of California which entered the Union in 1850—and it made Americans everywhere conscious of the West, and conscious of the fact that gold isn't always a yellow metal. It can also be rich farmland, healthful climate, well-stocked streams and rivers—and much else that a kindly mother nature has to offer.

After the great hordes had migrated to California, some means of fast communications had to be established.

In 1842, through a Federal grant of $30,000 to S. F. B. Morse, the Government had already demonstrated the value of the telegraph by financing a test line from Baltimore to Washington. Other lines had followed throughout the East. In June 1860 Congress passed a law offering $40,000 a year for 10 years to any company that would string a telegraph wire between the Middle West and the Far West. Telegraph communications in the East were excellent. In the West, Los Angeles was linked by wire with San Francisco, and wires had already been pushed eastward into Nevada mining centers.

After the offer by Congress, two young men formed companies to go after the bonus. James Gamble's crew worked from the Sierras eastward; Edward Creighton's men worked westward from the Missouri River. Both teams pointed toward Salt Lake City, and the first one there was to get an extra share of the money.

IT IS IRONIC that their greatest friends were the very ones they put out of business—the Pony Express men. For, in stringing their hasty lines across the continent, Gamble and Creighton followed to a large extent the route already carved out by the fast riders carrying the mail. And, as far as they were able to do so, the express riders protected the new lines and poles from the Indians.

Contrary to what many people still think, the Pony Express was not directly under the Federal Government. Senator William M. Gwin of California had tried to get the Government interested in such an express since 1854, but was not successful. However, the Government did agree to let the private firm of Russell, Majors and Waddell carry the mail, and no chapter in the history of the West is more exciting than that written by the fearless riders.

From St. Joseph, Mo., to Sacramento is 1,950 miles. The pony express covered the distance in 10 days. It took 500 ponies, 125 riders, and 200 stations. The express began operations in April 1860, and in the nearly two years that it ran, it covered a distance equal to twenty trips around the world. And up to that time, it was the best long-distance mail service in history. Each rider covered from 75 to 125 miles, changing horses every 10 to 15 miles. In this way the mail was moved about 200 miles a day.

William (Buffalo Bill) Cody was 14 when he became a Pony Express man. The story is true that he rode 321 miles in less than 22 hours because his relief man had been killed. The story of the express is filled with such feats of endurance and bravery, as well as death.

On October 24, 1861, the transcontinental telegraph line was joined in Salt Lake City. Washington congratulated San Francisco, and the Pony Express Company soon folded. From then on, important messages and news would go by wire—not by hoof.

Still, there was ordinary mail to be carried, and throughout the 19th century, the Post Office Department played a major role in the winning of the West. Post roads opened up new areas for settlement. Post offices tied the new to the old, and brought the entire country together. But for the hope of the U.S. mails, many a would-be homesteader would not have gambled on the wilderness.

FROM GOLD TO THE GOLDEN SPIKE

Thousands of people who had started for California never made it. They lay at the bottom of the Pacific, were buried in the steaming jungles of Panama, were put away in the cold mountain passes, or had nothing more to mark their passing than a single stone on the fearsome desert. The price had been mighty. There had to be a better way to the West!

In 1853 Congress did something about it by passing a bill ordering the Secretary of War to make surveys for a Pacific railroad. With that, Army engineers went into the wilderness and laid out five routes for a railroad to California. The planning and surveying took several years, at the end of which the United States was having internal disorders. The North, the South, and the Middle West were deadlocked over slavery, and some States were even talking about leaving the Union. Each section of the country wanted the railroad to begin from its own doorsteps: the Southerners wanted it to start from New Orleans or some other major southern city; the Northerners wanted it to start from Chicago or St. Paul. Each saw the advantages of having it in the coming conflict. But neither got it. Besides, there was no general agreement as to who would build it—the Federal Government or private companies. War came before a single shovelful of earth had been turned.

In 1850 the Government had granted land to Illinois, Alabama, and Mississippi for the construction of the Illinois Central from the Gulf of Mexico to the Great Lakes. Such a land grant grew out of the practice of giving Federal lands to States for construction of wagon roads, canals, and river improvement. The success of

Wagon train on Denver streets in the 1860's.

The sod house ("Soddy") became a familiar sight on the plains when the wagon trains went West.

the Illinois Central brought pressure for grants for a transcontinental railroad. As early as 1852, Commissioner Butterfield of the General Land Office recommended to Congress that land grants to the States for a transcontinental railroad be made.

No fruitful action was taken until 1862 when Congress passed a bill repeatedly introduced by Representative Samuel R. Curtis of Iowa—the Transcontinental Railroads Land Grant Act. The Act granted nearly 19 million acres of public land to the Union Pacific Railroad Company. The Northern Pacific and the Atlantic and Pacific Railroads received even larger grants to build other lines. The legislative departure here was that Congress and President Lincoln were giving public lands to private companies (not to States) in an effort to improve the welfare of all the people.

LINCOLN HIMSELF DECIDED where the transcontinental line would start—from Omaha. It would end in Sacramento.

On January 8, 1863, seven days after the Emancipation Proclamation had gone into effect, the Central Pacific turned the first shovelful of earth in Sacramento. The event was a rousing local holiday, complete with brass bands. The railroad was to move east through the Sierra Nevada and Rocky Mountains.

Nearly a year later, the Union Pacific branch at Omaha got off to a start. Omaha was still a small town, so there wasn't much of a crowd. The Union Pacific was to head westward until it met the Central Pacific coming east.

Each company had more than its share of problems. Using Chinese coolie laborers, the Central Pacific had to hack its way by hand through solid mountains of stone. Tunnels had to be cut through stubborn walls of granite, and trestles somehow had to be stretched across yawning canyons.

Whereas the Central Pacific was fighting nature, the Union Pacific, using mostly Irish immigrant labor, was fighting people—Indians and outlaws. The prairie tribes were determined to stamp out the encroachment of the Iron Horse, and outlaw bandits were determined to steal every dime of the workers' pay. The toll was terrible, but the job was done.

On May 10, 1869, the two lines met and in high ceremony were joined with the golden spike at Promontory Point, Utah. For 8 years the country had been joined by a steel wire—now it was joined by rails. The word was flashed both East and West: "Done!" And a new chapter began in American history.

DISTRIBUTING THE PUBLIC LANDS

No Federal agency was more important in the saga of the western settlement than the General Land Office. Organized in 1812 as an agency of the Treasury Department, it was transferred in 1849 as one of the first five agencies of the new Department of the Interior. In 1946 it was combined with the Grazing Service to form Interior's Bureau of Land Management. 1962, then, is the 150th anniversary of the General Land Office.

What has it done during its century and a half of operations? Much! The infant agency was charged with issuing land grants, organizing land sales at land offices, issuing patents (deeds), and keeping complete land records. Ten employees comprised the new agency—including the Commissioner! For the most part, the new agency sold or leased public lands to the highest bidder, or distributed the land in small grants as directed by Congress.

Many who immigrated to the United States had undertaken the journey because of a cruel international misconception—that free land in America was available to

This famous picture captured one of the most dramatic moments in the history of the West. On May 10, 1869, at Promontory Point, Utah, the Central Pacific Railroad, building eastward, met the Union Pacific, building westward. In a colorful ceremony (shown above), the golden spike was driven in to signal completion of the Nation's first transcontinental railroad.

anyone who would settle on it. This was not true. The misconception did, however, lay the foundation for the free land concept that came later.

In 1776 Thomas Jefferson had written prophetically: "The people who will migrate to the Westward . . . will be a people little able to pay taxes. . . . By selling the lands to them you will disgust them, and cause an avulsion of them from the common union. They will settle the lands in spite of everybody—I am at the same time clear that they should be appropriated in small quantities."

Between 1801–1854, Congress, recognizing the difficulty of controlling squatters, passed a series of laws legalizing squatting on public lands. In each successive law the regulations became more liberal, until in 1854–55 squatting was even allowed ahead of survey. The laws did require, however, an eventual payment of the minimum prevailing statutory price for the land. Only by squatting and tending the land could many settlers hope to raise enough money to pay for it when the time came. The growing concept that public lands belonged to the people and that they had every right to a parcel was one of the principal arguments later used in advocating passage of a homestead law.

THE HOMESTEAD ACT was passed on May 20, 1862, but it was a long time a-borning. As a concept, it had endured the attacks of many enemies over a long period of years, some of whom practically made careers out of fighting it. There were those who felt the Government should keep the land for revenue-raising purposes, to lease it or sell it off as it needed the funds. There were the people's heroes, too, who deeply believed the land belonged to the people. Some of them were: Congressman William P. Thomasson of Kentucky, the first to introduce actual free land legislation (in 1845); Andrew Johnson, proponent both as a Senator and later as President; Senator Thomas Hart Benton of Missouri, most eloquent proponent in the Senate; and Congressman Galusha A. Grow of Pennsylvania, key spokesman in the House, and sometimes called the "father" of the Homestead bill. The labor movement, too, now organizing, feared the industrial revolution's threat of replacing workers with machines and spoke out strongly for free land legislation.

The Homestead Act, a century old in 1962, authorized unrestricted settlement on public lands to all settlers, requiring only residence, cultivation, and some improvement of a tract of 160 acres. Any person was eligible who was head of a family or had reached the age of 21, who was a citizen or intended to become one, and who did not own as much as 160 acres. After living on the land and farming it for 6 months, the settler could buy the homestead at $1.25 an acre, but if he lived on it and farmed it for 5 continuous years, he could get free title by paying a filing fee of $15.

By 1862 most of the land in the Midwest had already been settled. The fiction of the so-called Great American Desert had been exposed. The great plains were not a desert at all—they were rich and fertile. The Homestead Act, by opening up vast areas of the far West, encouraged land-seeking pioneers to continue westward. Their lot was seldom easy. The low rainfall and short growing season in parts of the West defeated many efforts, and Congress liberalized the provisions of the Act many times to meet new and changing conditions. But, despite the odds, the Nation at last became populated from coast to coast.

The millions of acres distributed by the General Land Office played an inestimable role in building American stamina and character. It took strong men and women to face the rigors of homesteading. Drought, fires, grasshopper plagues, and long cold winters were the principal opponents facing the homesteader. There had to be caches of emergency food, fire lanes around homes, and enough fuel to endure the longest winter. And, a rifle had to be kept ready at all times in case of hostile Indians and wild animals.

The effect of the act upon the General Land Office was walloping. The workload doubled, then tripled, then became staggering. The number of offices increased tremendously between 1862 and 1900. In 1870 the office had 136 employees and 77 District Land Offices spread across the Nation. By 1900 there were 120 District offices. It was during this period that the expression "doing a land office business" became an American idiom.

William Jennings Bryan summed up the accomplishments of the homesteading pioneers: "They were men

When the Homestead Act was passed in 1862, settlers were barred from Oklahoma, an area reserved for the red man. In 1885 Congress authorized the President to negotiate settlement with the Indians. Upon reaching an agreement for the land, the Government—to assure equal opportunity among the land seekers—announced that at midnight, April 22, 1889, the territory would be open to homesteaders. At the stroke of twelve, the famous "run of 1889" began. Whole towns sprang up overnight. Oklahoma City was settled in a day by some 10,000 people. Shown above is the town of Guthrie—less than 1 month later!

Life on the prairie was hard, and there was no wood to burn. This classic photograph, capturing the great spirit of pioneer women, shows a prairie wife gathering buffalo chips for use as fuel.

and women who gave the world more than they took from it."

Thomas Donaldson, writing in *The Public Domain,* 1884, paid this tribute to the 22-year-old act: ". . . the Homestead Act stands as the concentrated wisdom of legislation for the settlement of the public lands. It was copied from no other nation's system. It was originally and distinctively American, and remains a monument to its originators."

During its 150-year history, the Bureau of Land Management has transferred over *one billion* acres of public domain to private hands. In 1961, the Bureau contributed more than $159 million to the U.S. Treasury—the substantial return on proper management of the 467 million acres of land that still belongs to all the people.

Today there are almost no remaining areas of public lands suitable for farm development. While homesteading represents a rich and vital part of U.S. history, it is now mostly a romantic memory.

GROWTH! IN MANY DIMENSIONS

In 1860 the population of the entire trans-Mississippi West was slightly more than 9 million, with the majority living within one day's travel of the Mississippi River. Thirty years later—with the telegraph, the transcontinental railroads, and the Homestead Act showing great effect—there were over 25 million people in the same region. The Dakota Territory surged from fewer than 5,000 inhabitants in 1869 to over 500,000 in 1889, when the territory was split into two States. In 1860 Colorado had 34,277 citizens; during the next 30 years it soared to 400,000.

Growth in itself was not enough. The homesteader needed continuing help from his Government.

Interior's Bureau of Agriculture, which got promoted to a separate department in 1862, was a continuing ally of the pioneer. Its early achievements were many. In 1868 the California citrus groves were attacked violently by a destructive beetle called the cottony-cushion scale. The pest spread so rapidly that many growers were soberly predicting complete disaster within 10 years. The Government's agricultural experts found the answer and imported the Australian ladybird beetle. The beetle found the cottony-cushion scales such good eating that soon there were no more left. Sheep scabies, Texas tick fever, grasshoppers, cotton boll weevils, prairie dogs and other predators all found their match in Uncle Sam's friends of the growers. The Department was credited, as one sodbuster put it, with "bringing science down from the sky and hitching it to a plow."

IN GIVING OUT PUBLIC LANDS, Congress did not forget the educational needs of a mushrooming America. By the Land Grant Colleges and Universities Act of July 2, 1862, more than 11 million acres of public lands were granted to the States for the establishment of colleges and universities. Representative Justin Morrill of Vermont is credited with establishing this perpetual endowment to higher education from the public domain. The Act did not establish specific curriculum standards, but stipulated that liberal and practical education was to be promoted through "such branches of learning as are related to agriculture and the mechanic arts."

The Act eventually became a milestone in American education. The State of Iowa was the first to apply for an agricultural college land grant, and received 240,000 acres from which the college eventually realized more than $500,000 in revenue. Eight years after passage, 37 State governments had applied for educational land grants. However, the idea of going to college to study "farming" met with surprising public apathy. In 1876, its first year of operation, Louisiana State University had five faculty members and only three students. The Illinois Agricultural College employed four professors, who taught 41 students. It was not until 1880 that the University of Wisconsin graduated an agricultural student, and the University of Minnesota did not have a student enrolled in an agricultural course until 1889.

The idea caught on slowly but surely. Additional laws have since been enacted to assist land grant colleges and universities. Today, the 68 land grant colleges and universities in the fifty States and Puerto Rico constitute a vital part of our public institutions of higher learning. In 1959 these institutions granted 100,000 degrees—indeed a living and ever-growing endowment from the great public domain.

LAW AND ORDER

No land is truly won until law and order are established. In many places in the Old West, the only law was Federal law, and the only enforcers were Federal marshals and judges.

Despite the stirring episodes on television, it is doubtful that Wild Bill Hickok, town marshal of Abilene, or Wyatt Earp of Dodge City, were ever honest-to-goodness U.S. marshals. Nonetheless, the exploits of real U.S. marshals are just as exciting and certainly better authenticated. Tom Smith is a good example. Smith was town marshal of Abilene, Tex., before Wild Bill took up the calling. He later became U.S. marshal there and fits the American legend of the frontier peace officer perfectly. He was a tall, handsome, well-groomed Irishman who came originally from New York. And, he did not drink or gamble. His big difference, however, was his ability to sling his fists—as well as his guns. He could take on any man, and often many men, in a sidewalk or barroom brawl—and the side of the law would prevail.

Marshal Smith lived by the "sword," though, and his number came up while arresting two angry gunmen outside town. Abilene did not forget him. His grave is marked with a bronze plaque which tells passersby: "A fearless hero of frontier days who, in cowboy chaos, established the supremacy of law."

NO JOB IN THE OLD WEST was more dangerous than that of a Federal marshal. The code of the frontier frequently was vengeance on a scalp-for-scalp basis. There were large-scale feuds in the towns and villages, small-scale wars on the rangelands, raids by organized vigilantes who often took the law unto themselves, and endless robberies, assaults, and murders. Even in places where the marshal could hardly walk the street safely at high noon, he was still expected to enforce the law. Understandably, recruiting problems were enormous. The pay wasn't too good and the only guarantee was danger.

In addition to their law-and-order duties, the marshals were called upon to perform a variety of tasks—such as taking the first census in the West! Marshal Church Howe, the first marshal of Wyoming, took his deputies and did a head count in the wilderness, among hostile Indians. Several of his men lost their lives, but when the figures were in, the huge Wyoming Territory was found to be a booming 21,000.

FEDERAL JUDGES had a mighty job, too. Perhaps of these Judge Isaac C. Parker was the most colorful—if not the most determined to command respect for the law. Eastern tabloids tagged Parker "the Hanging Judge" because in his 21 years on the Federal bench, his scrupulous justice sent 79 men to the rope.

"I never hanged a man," Parker once said, "it was the law that has done it." Cherokee Bill (Crawford Goldsby) was one of the more notorious who encountered Parker's firmness. He had killed his thirteenth man, a jail guard, when Parker sentenced him "to hang by the neck until dead." And, on March 17, 1896, Parker's fearful gallows (that could accommodate six men at one time) ended Cherokee Bill's contempt for human life.

No fewer than 200 men "rode for Parker" as deputy U.S. marshals, policing the rugged 74,000 square miles of Arkansas Territory under Parker's jurisdiction. Sixty-five were killed in the line of duty, but 28,000 arrests were made from 1875 to 1896. And, though Parker claimed not to believe in capital punishment, he used it when there was no other way to uphold law and order in his area.

WHEN?

WHEN WAS the West won? Was it in 1912 when Arizona became the 48th State, closing the books for half a century on the highest incentive offered by Congress to newly won lands—that of statehood? Or, was it in 1914 when the Panama Canal offered faster sea travel between east and west?

Before settling on any particular date or event, the reader should consider the hard lesson of the early 1930's. The Great Dust Bowl swept across the plains and snatched away lands that had been counted as won. The Government's conservation and reclamation projects, administered by public servants, have since demonstrated that lost land needn't be written off the books.

When was the West won? No one can say for sure. However, the same partnership that won it is still very much at work to keep it that way.

CONCLUSION

These, then, are some of the highlights of the role of the Federal Government and its employees in the winning of the great American West. As Government men and women—from the early Presidents, the frontier Congressmen, Lewis and Clark, the army soldier, and on down to the last bureau clerk—these people did what they had dedicated themselves to do: to help the people work out their own destiny.

What better purpose has Government?

The authentic photographs used as illustrations were furnished by Agriculture's Centennial Office and Interior's Bureau of Land Management. Some of the items are from their own files, and some were collected by them from Archives, Library of Congress, and State historical societies.

TRAINING DIGEST

TRAINING AGREEMENTS STREAMLINED

New Commission instructions in the Federal Personnel Manual emphasize the management uses of training agreements. The most important changes include:

(1) Emphasizing quality of content of training program.
(2) Streamlining information needed for approval of an agreement.
(3) Authorizing agencies to include provisions in the agreement which would make it possible for them to set the length of the program to individual needs, extend the length of training, alter its sequence, or add new subject matter.
(4) Establishing a 2-year time limit on all agreements approved after July 31, 1962.

The purpose of training agreements is to make it possible for agencies to substitute intensive, accelerated training for a portion of normal qualification requirements.

Agencies submitting training agreements are expected to provide information about:

(1) Reason for training program.
(2) Positions covered.
(3) Methods of selecting trainees.
(4) Outline of training content.
(5) Evaluation of trainees' progress.

Information about training agreements is contained in FPM Letter 271–1.

GSA INSTITUTE BEGINS OPERATIONS

In response to the President's recent call for agencies "to undertake increased efforts to search out and apply the most modern and effective means used either in Government or private industry to increase efficiency and output," the General Services Administration has established the GSA Institute for Interagency Training, which opened its doors on January 1.

The Institute, located in Washington at 722 Jackson Place NW., was established to spearhead a new drive for improved Federal management in procurement, property management, and records. Interested Federal agencies have sent employees to the first three training courses: Shipping Household Goods, Inventory Management, and Procurement Contracting and Policy.

GSA plans to establish regional centers to offer similar training to field personnel after an initial period of program development and refinement. Instruction, in both Washington and the field, will include buildings management, utilization and disposal of property, procurement and supply management, traffic and communications management, space management, records management, and related administrative sciences. All courses will be listed in the GSA Institute Bulletin and in CSC's Interagency Training Bulletin.

TRAINING INSTRUCTORS AND EMPLOYEE DEVELOPMENT OFFICERS

A new Instructor Training Course, primarily for persons who instruct or train others to instruct, will be conducted by the Commission in January. The comprehensive 2-week course, offered as an interagency training program, will cover such subjects as the psychology of learning, teaching methods, preparing lesson plans, and the use of visual aids. Emphasis will be placed on a series of practice instructor sessions for each participant.

In February, the Commission again will conduct the Basic Course in Employee Development, and in May the Advanced Course in Management Development Programs and Methods. Since the basic course was first offered a year ago, it has been attended by 100 employee development officers, and the advanced course by 50.

Information on the courses can be obtained from the Office of Career Development, Room 216, U.S. Civil Service Commission.

TRAINING NOTES

Per diem paid to participants residing in the area in which training is given or conferences conducted should be justified fully on vouchers. This was made clear by a recent General Accounting Office report to Congress. The vouchers questioned did not make clear why conferees from nearby were kept overnight when no business was scheduled in the evening.

Pre-doctoral scholarships to increase the supply of scientists and engineers available to the space program are being supported by the National Aeronautics and Space Administration through grants expected to total about $2 million the first year. Student stipends will be $2,400 with additional allowances up to $1,000.

Educational television channels should be tripled in the next decade from the 309 channels now allocated, according to a report to the Office of Education by the National Association of Educational Broadcasters. The report, *Needs of Educational Television Channel Allocations,* is available from the Government Printing Office for $9.25.

A central training organization has been established in the Bureau of Ships which consolidates all Headquarters' training operations and plans. Under the command of a Naval officer, it reports direct to the Bureau's top command. Field training remains part of the Personnel Office functions.

—Ross Pollock

U. S. GOVERNMENT PRINTING OFFICE : 1963 O - 670040

Worth Noting *(Continued)*

ROCKEFELLER AWARDS for public service were presented recently to career ambassador Llewellyn E. Thompson, U.S. Ambassador at Large; J. Stanley Baughman, president of the Federal National Mortgage Association, HHFA; Reginald Geary Conley, assistant general counsel for the Department of Health, Education, and Welfare; Morris H. Hansen, director of research and development, Census Bureau; and Hugh L. Dryden, deputy administrator of the National Aeronautics and Space Administration.

NINE CAREERISTS of the executive branch began a 10-month internship in Congressional operations in November. With about 20 political scientists, journalists, and others, they will undergo intense orientation in Congressional matters, then work in assignments in the offices of Congressmen or House Committees. After the Easter recess they will shift over to the Senate for similar experience. The program for executive branch employees is presented by the Civil Service Commission in conjunction with the American Political Science Association.

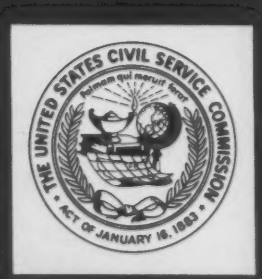
NINETY FEDERAL EMPLOYEES became "teachers for a day" in seven Washington-area school systems in November. They replaced social science teachers who were attending a conference. Federal employees selected as personable, articulate, and knowledgeable discussed their own jobs, careers in Government, and missions of Federal agencies with some 20,000 high school students in 250 classes.

AWARD-WINNING achievements of Federal employees recently received nationwide recognition on 2 network radio programs. Results of the Government-wide incentive awards program for fiscal year 1962 were discussed by Bryson Rash and Civil Service Commission Chairman Macy on the NBC Monitor program and by Charles Collingwood on the CBS Sidelights to the News program.

FEDERAL AGENCIES have been urged to take steps to assure that every supervisory and managerial official has a full understanding and appreciation of his key role in administering 2 significant incentive features of the Salary Reform Act. Civil Service Commission has asked agencies to bring to the attention of these officials orientation material on the provision requiring employees to perform at "an acceptable level of competence" to qualify for within-grade salary increases, and on the new authority to grant additional within-grade increases for high-quality performance (see CSC Bulletin 531–10).

TWO SPECIAL STUDIES are being undertaken by the Civil Service Commission at the request of the Committee on Federal Employment Policies and Practices of the President's Commission on the Status of Women. Purpose of the studies is to provide information that will help to account for the different advancement rates for men and women in the Federal service (for details, see Bulletin 292–3).

UNITED STATES
GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, $300
(GPO)